

Ad5			Ad5			ts149			ts149			°C MOI
37	5		39.5	5		37	5		39.5	5		
10	1	0.1	10	1	0.1	10	1	0.1	10	1	0.1	μl

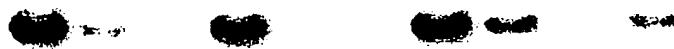


Figure 1

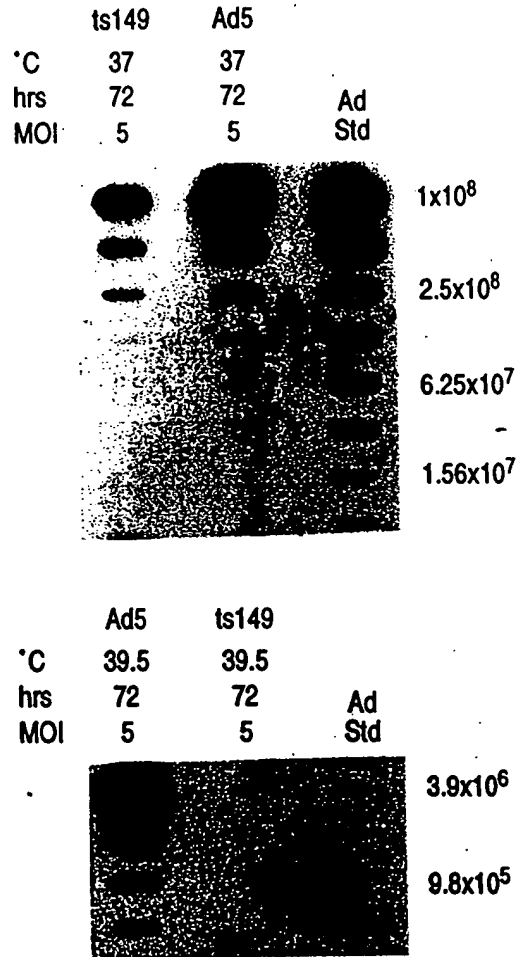


Figure 2

ts149				Ad5	ts149		°C hrs MOI
39.5				37	39.5	96	
72					72	5	
5	10	20	40		5	5	



Figure 3

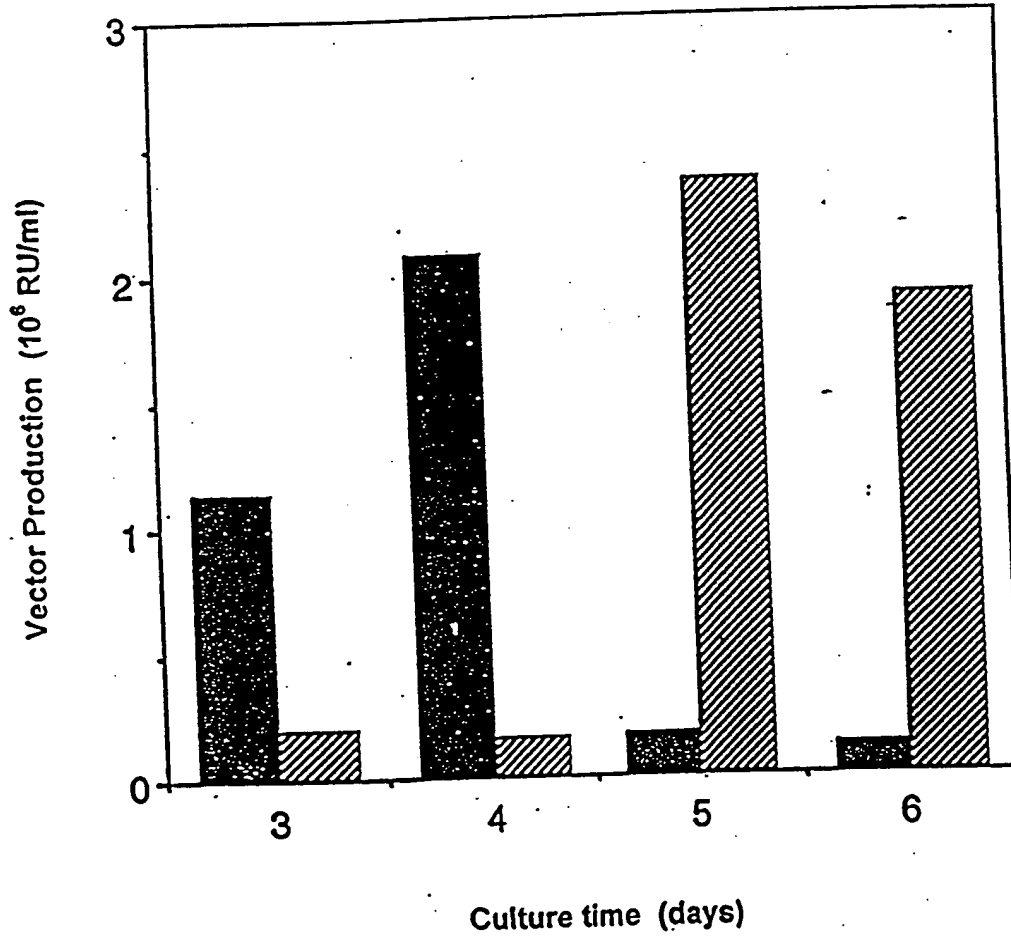


Figure 4

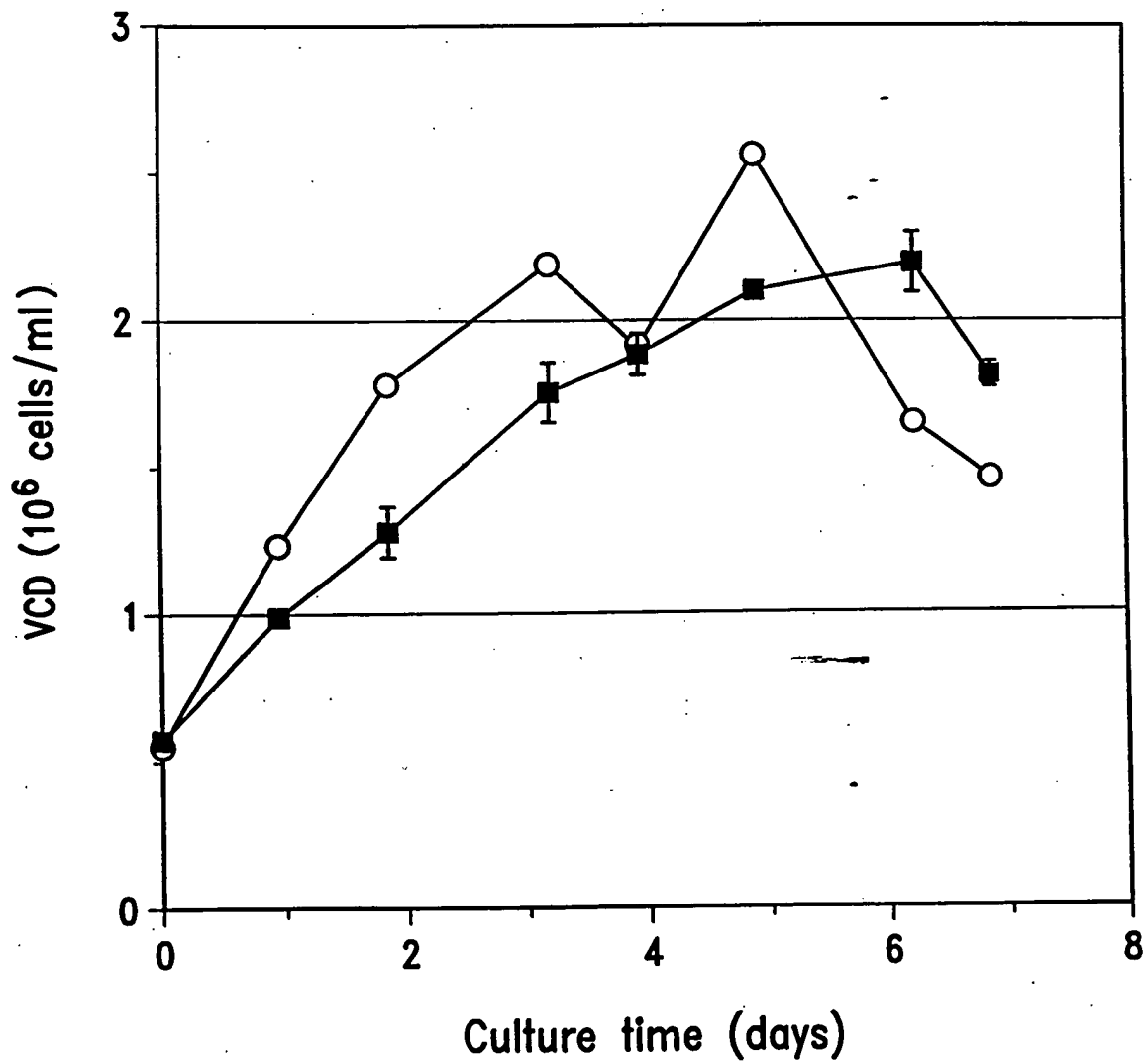


Figure 5

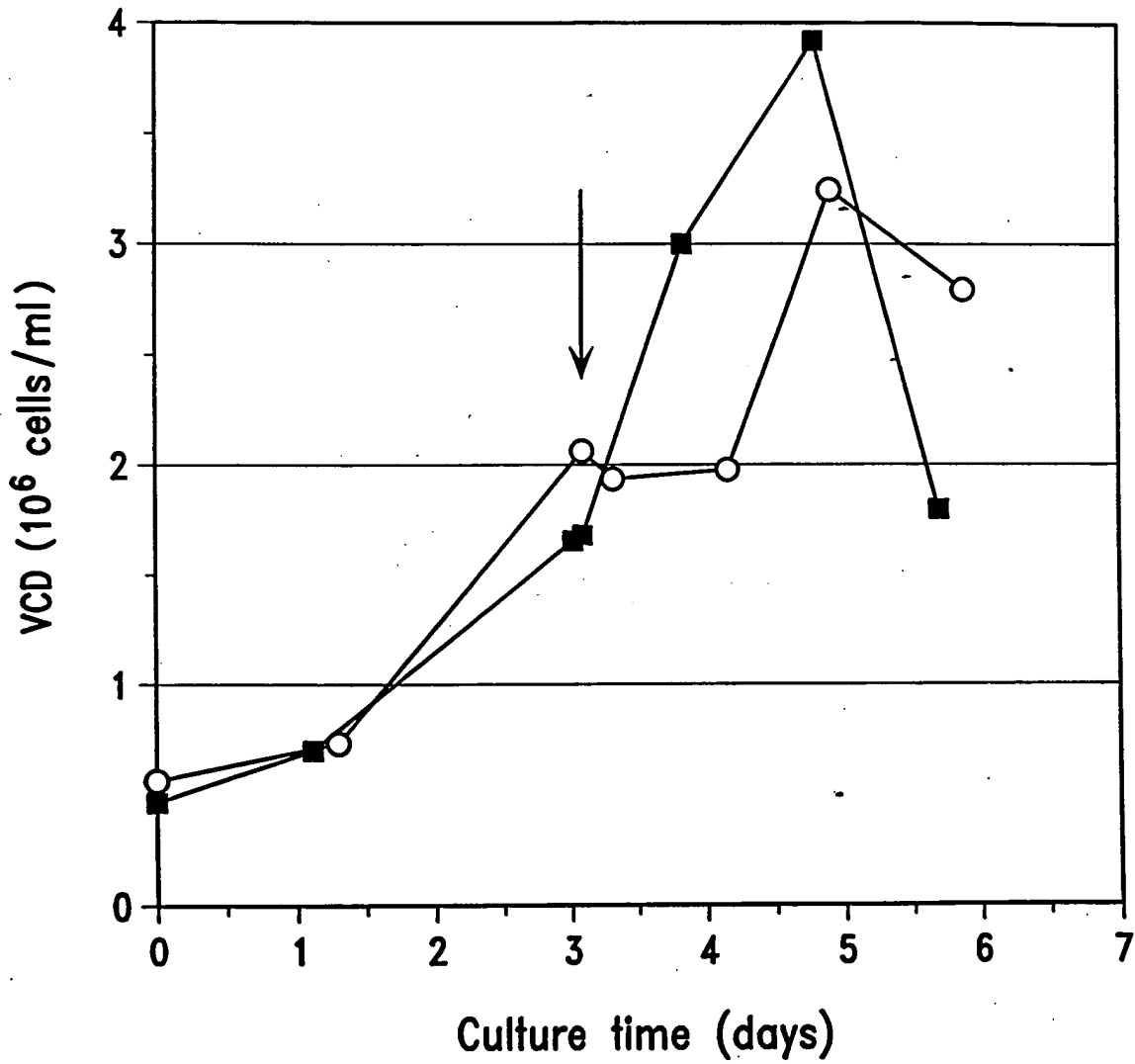


Figure 6

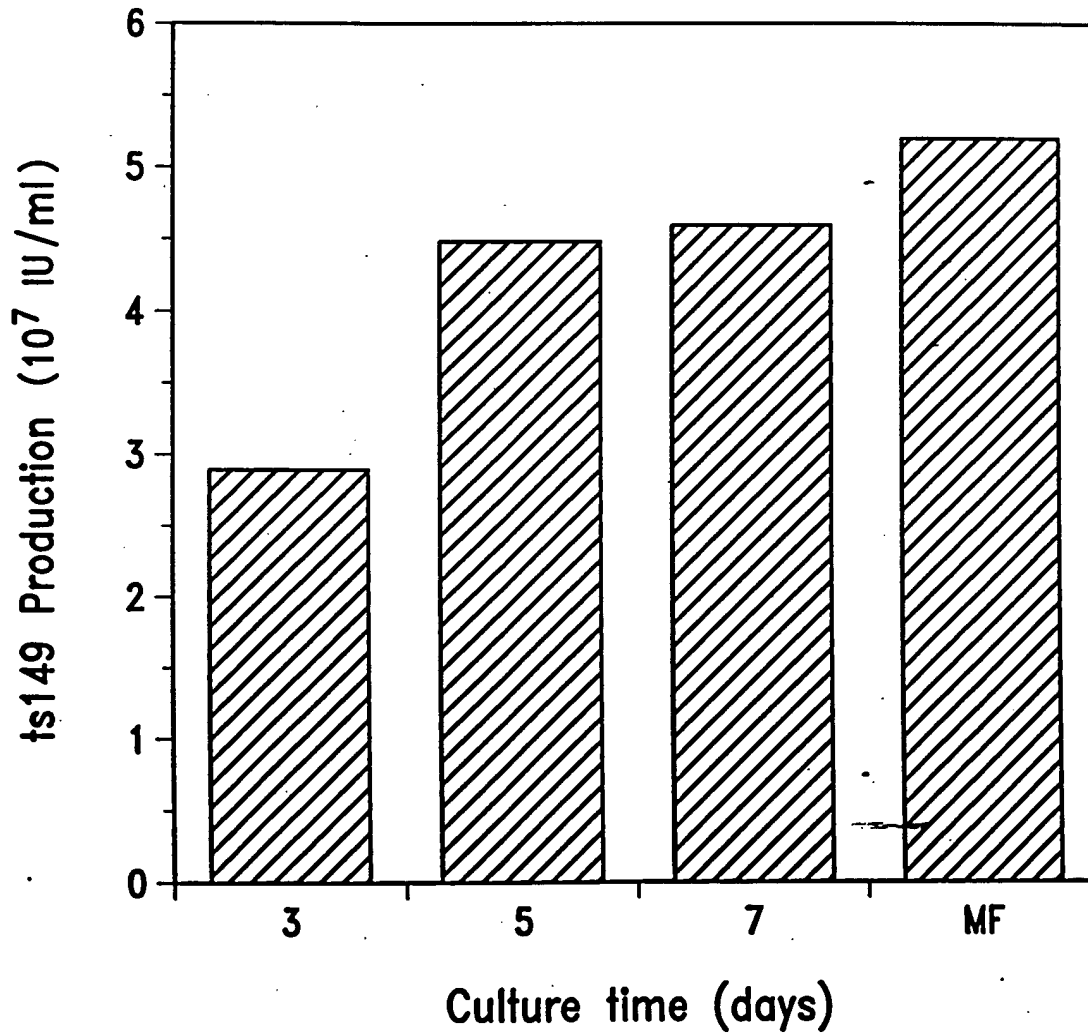


Figure 7

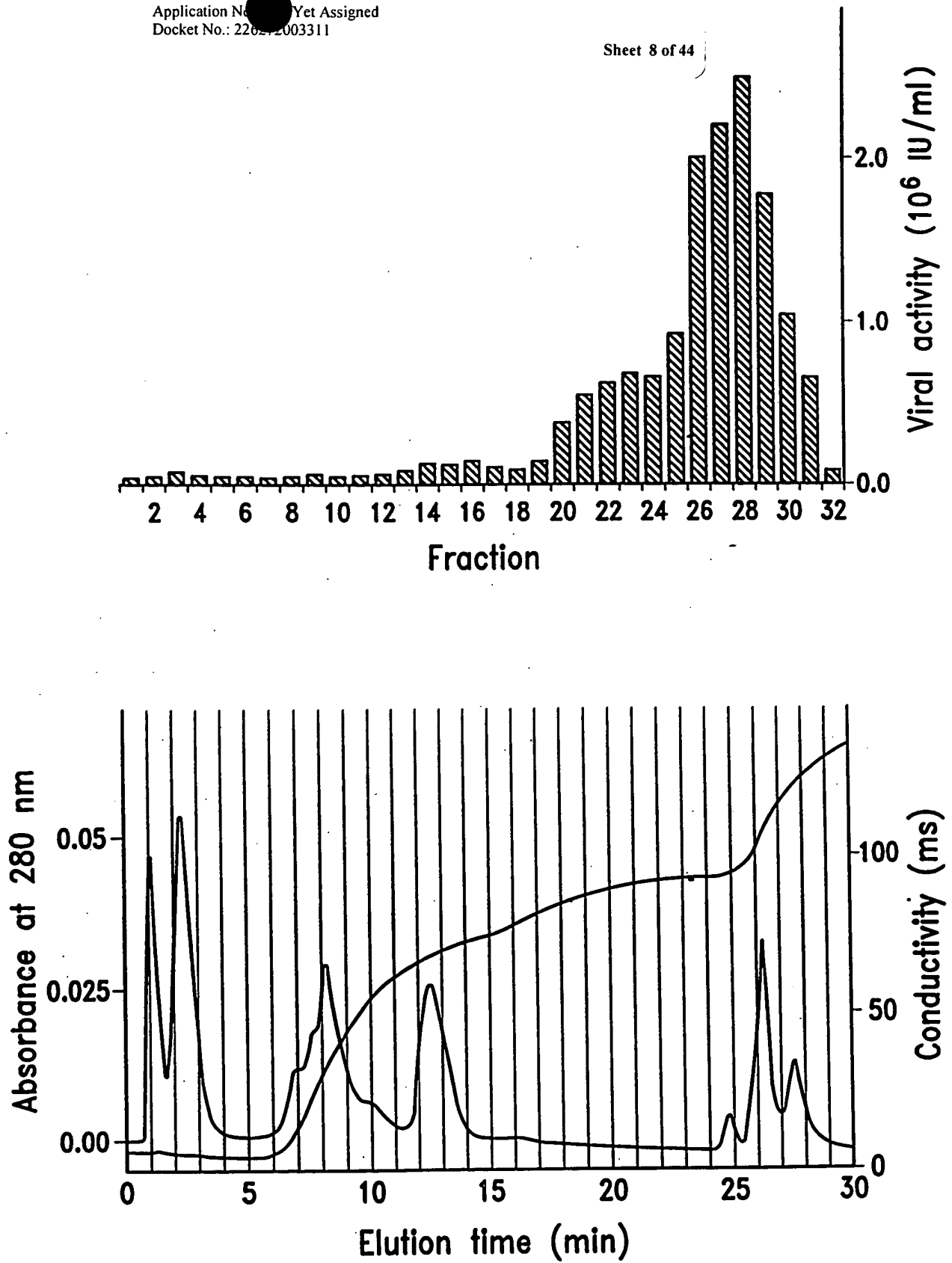


Figure 8



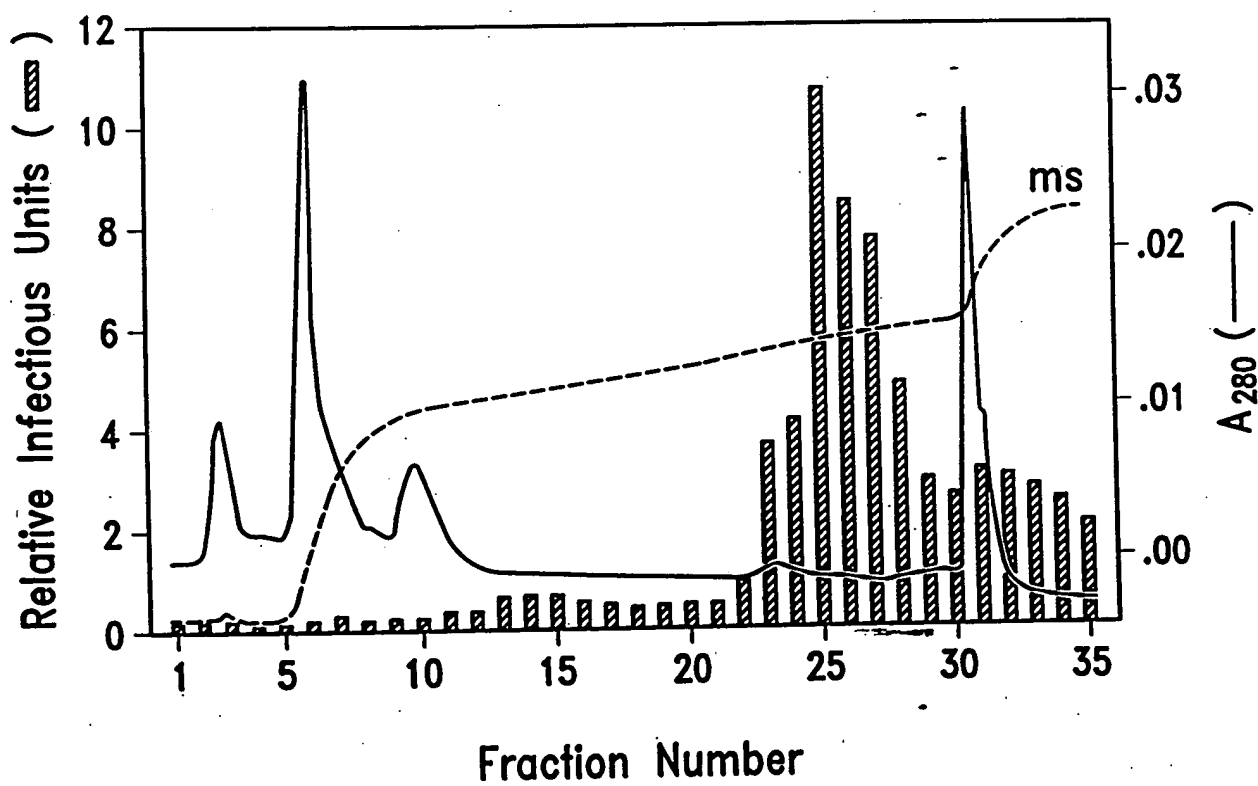


Figure 9

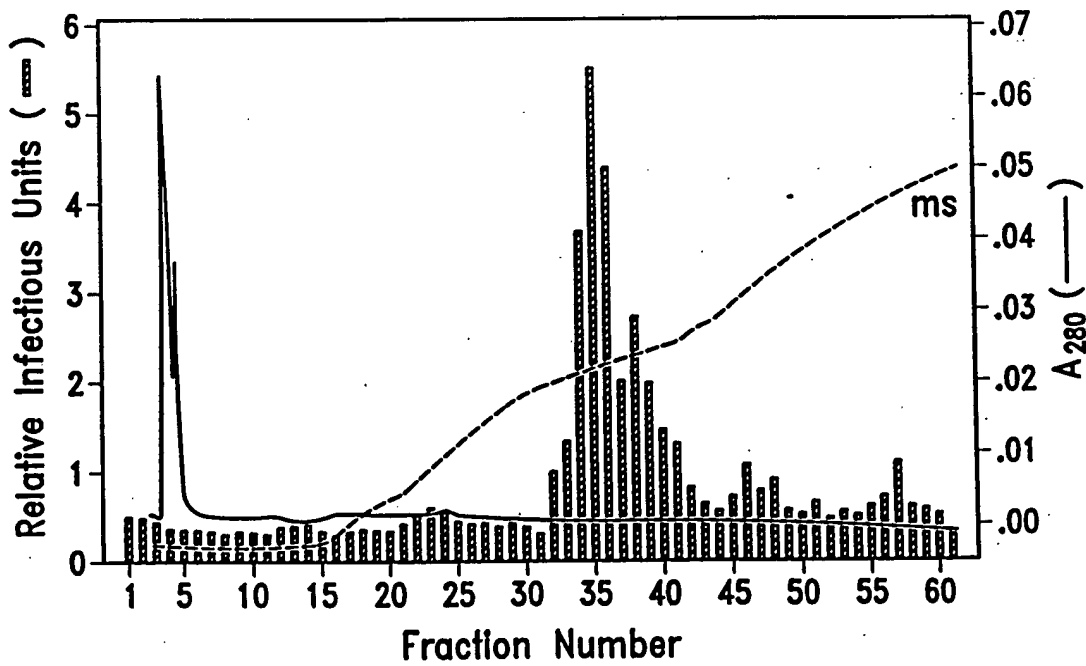
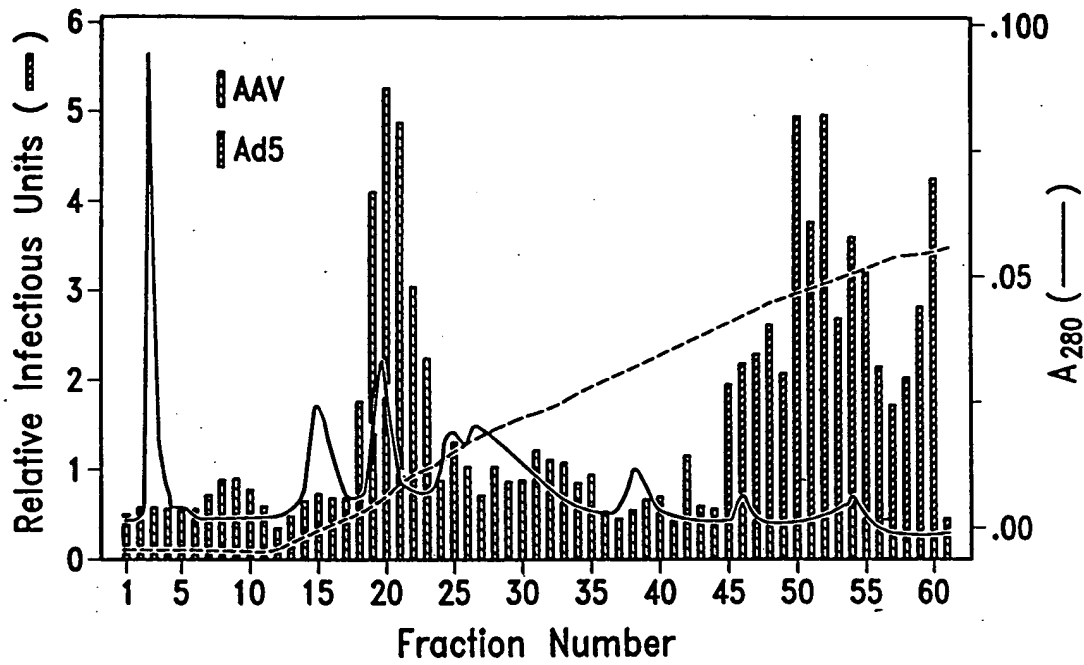


Figure 10

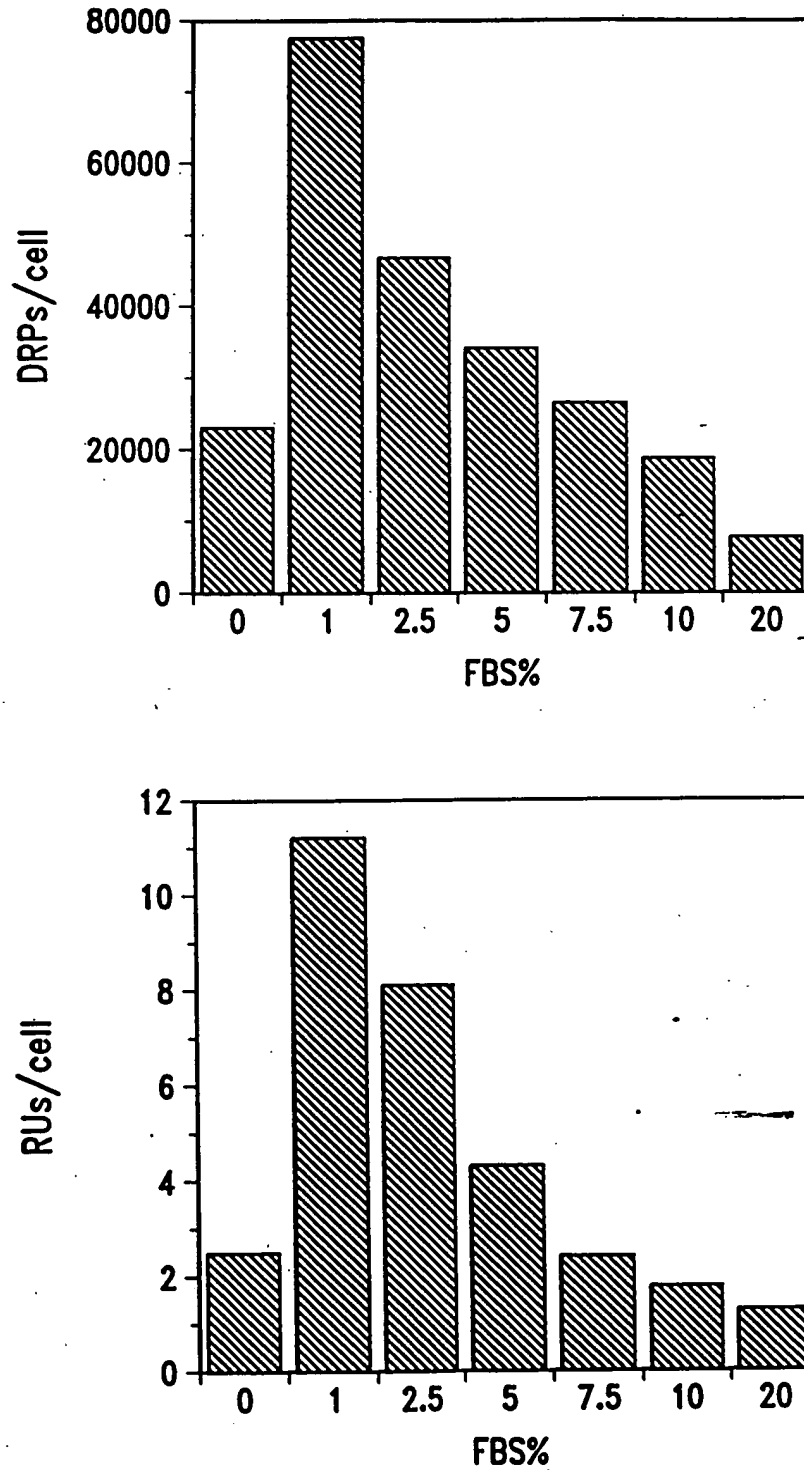


Figure 11

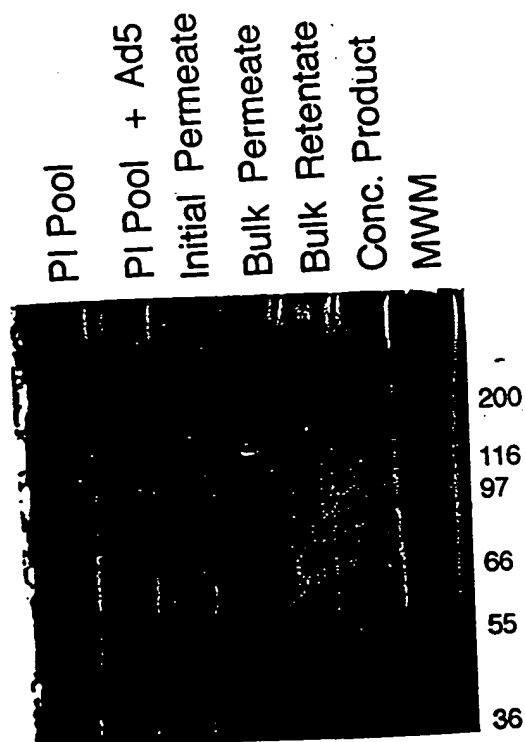


Figure 12

52471c2.bio - 2000.0 $\mu$ l 1:AAV FILTR

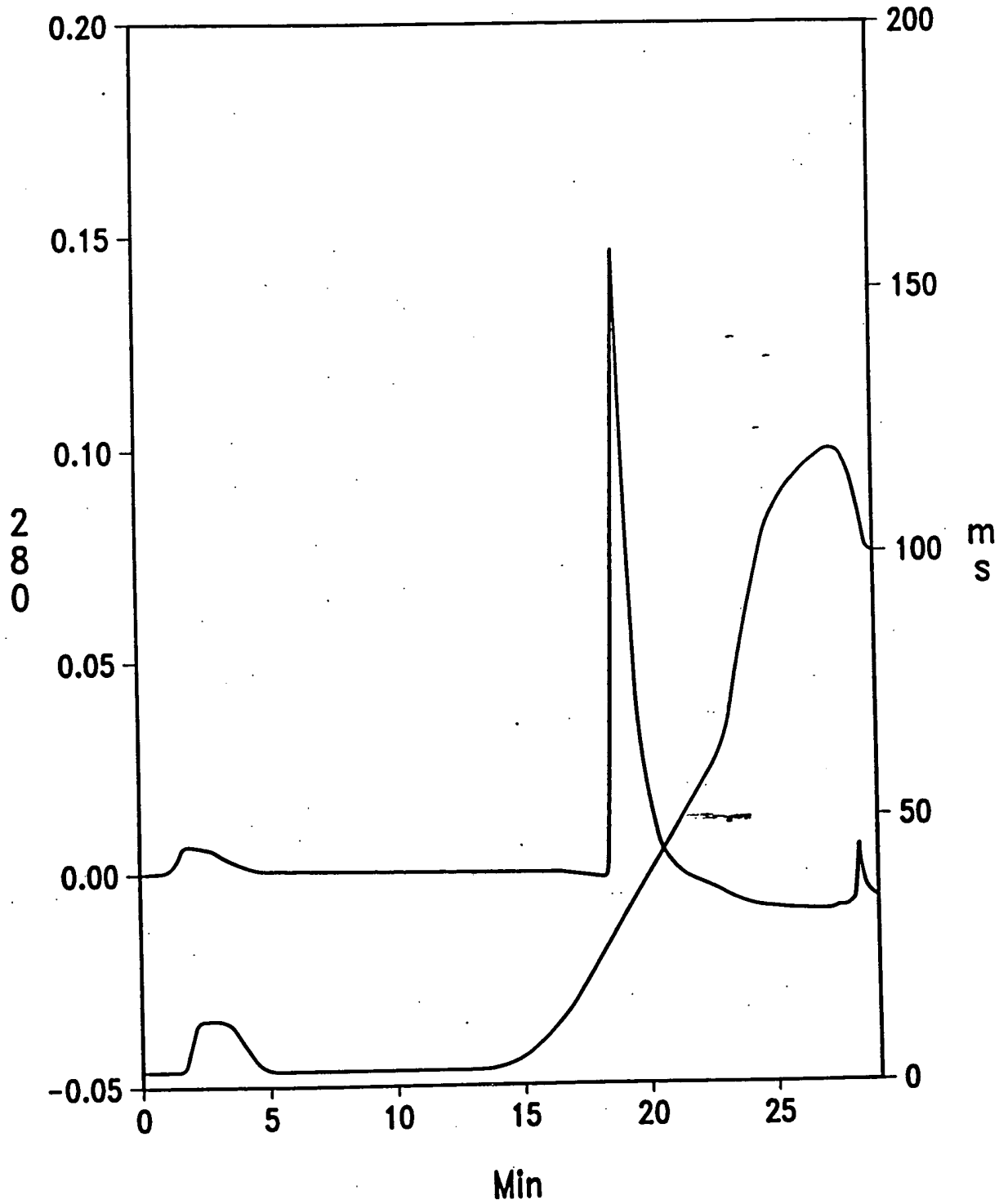


Figure 13

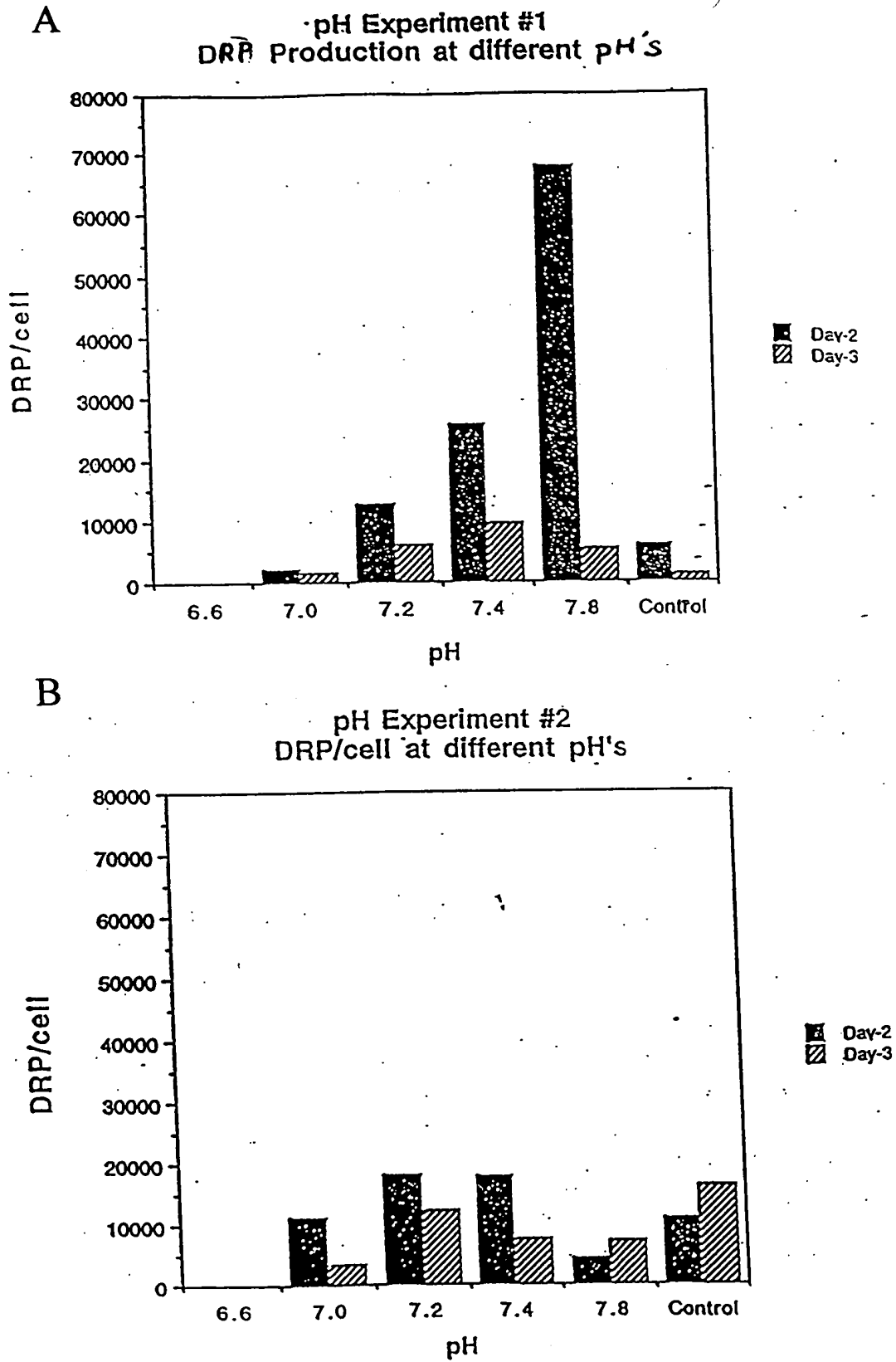
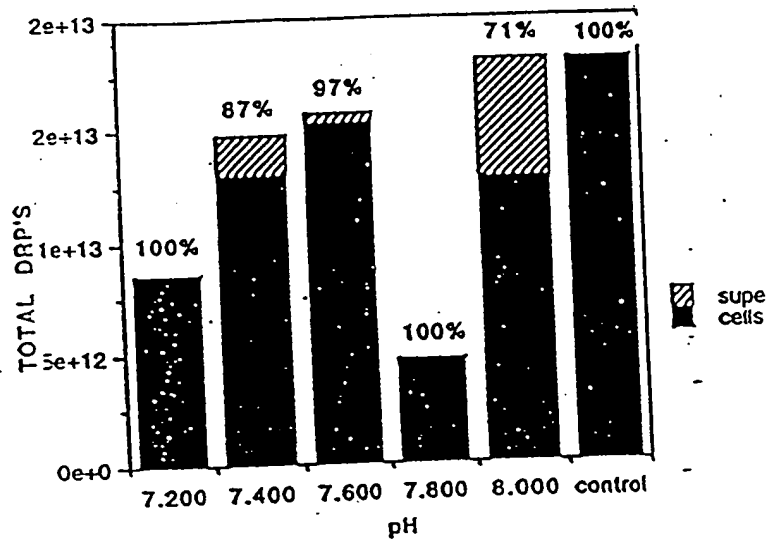


Figure 14

A

CFTR JL-14 REACTOR pH EXPERIMENT #3  
 DISTRIBUTION OF VECTOR IN CELLS/SUPE  
 TOTAL CULTURE DRP'S DAY 2



B

CFTR JL-14 REACTOR pH EXPERIMENT #3  
 DISTRIBUTION OF VECTOR IN CELLS/SUPE  
 TOTAL CULTURE DRP'S DAY 3

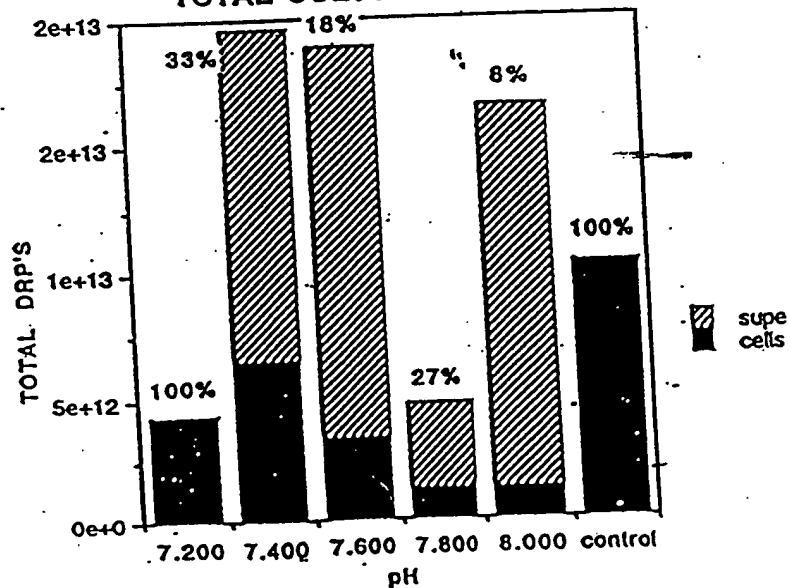
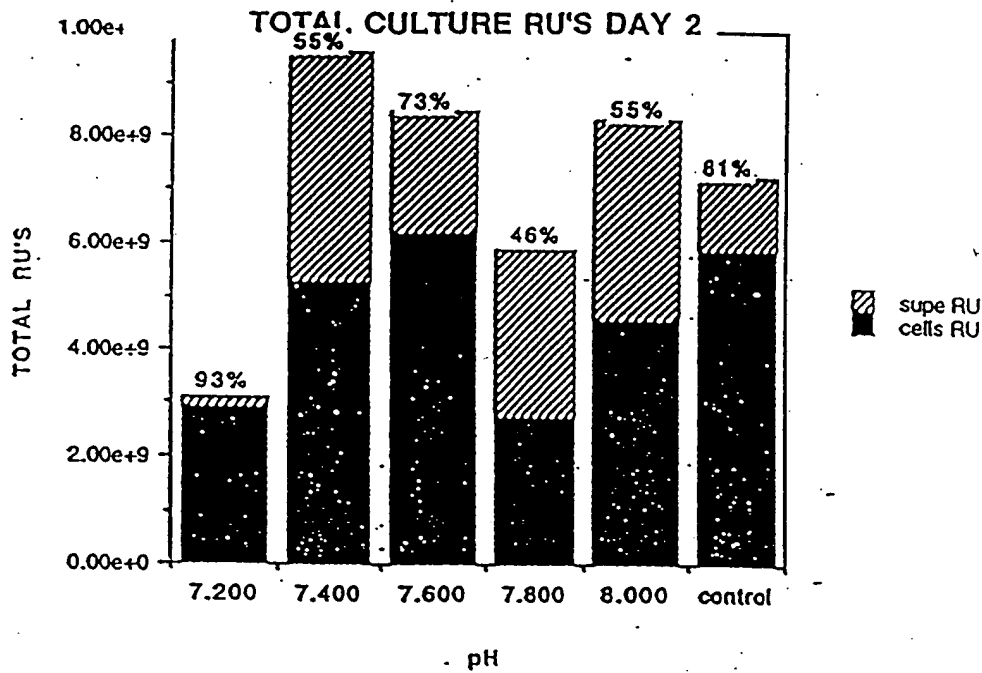


Figure 15

**A**  
**CFTR JL-14 REACTOR pH EXPERIMENT #3**  
**DISTRIBUTION OF VECTOR IN CELLS/SUPE**



**B**  
**CFTR JL-14 REACTOR pH EXPERIMENT #3**  
**DISTRIBUTION OF VECTOR IN CELLS/SUPE**

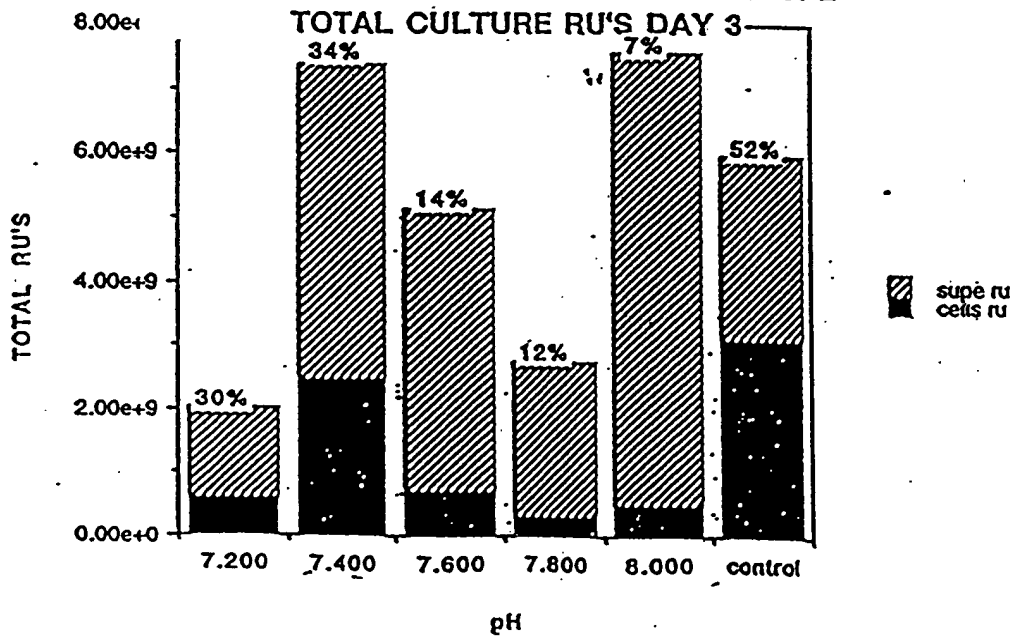


Figure 16



CFTR JL-14 REACTOR pH EXPERIMENT #3  
DAY 3 PARTICLE TO INFECTIVITY  
SUPERNATANT AND CELLS

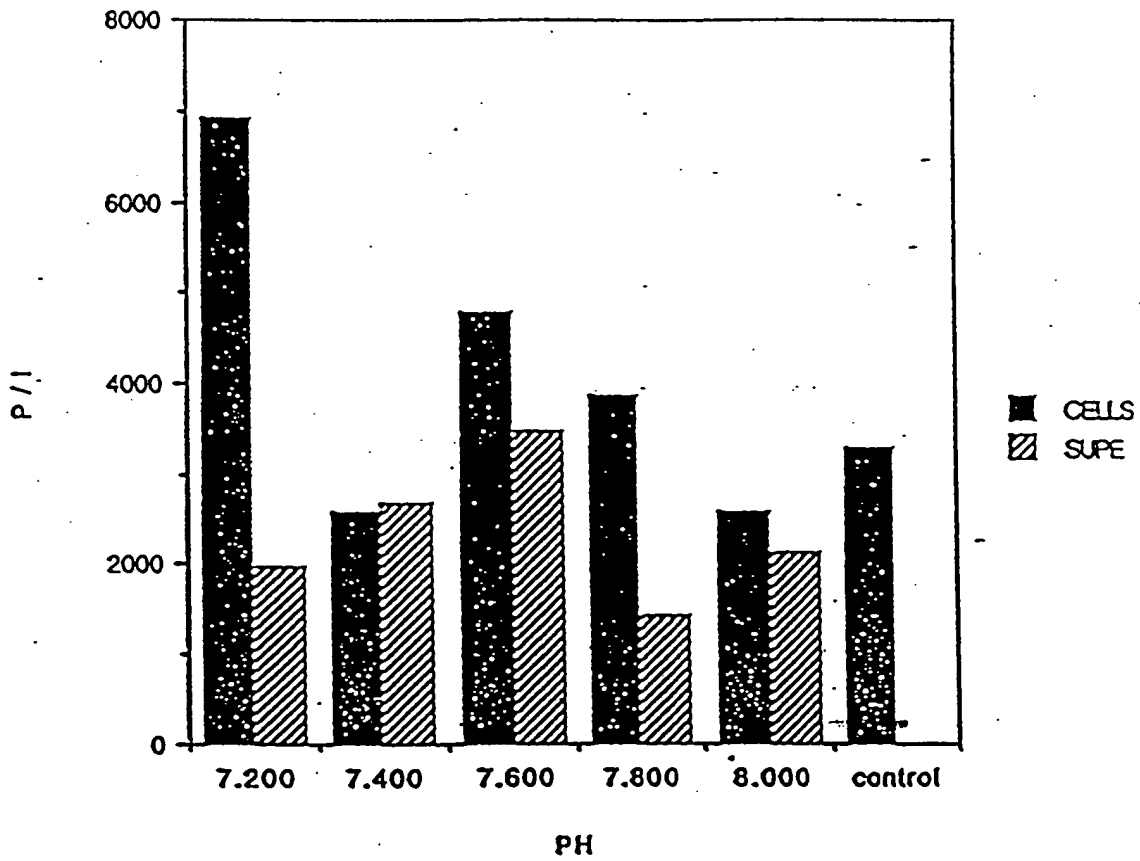
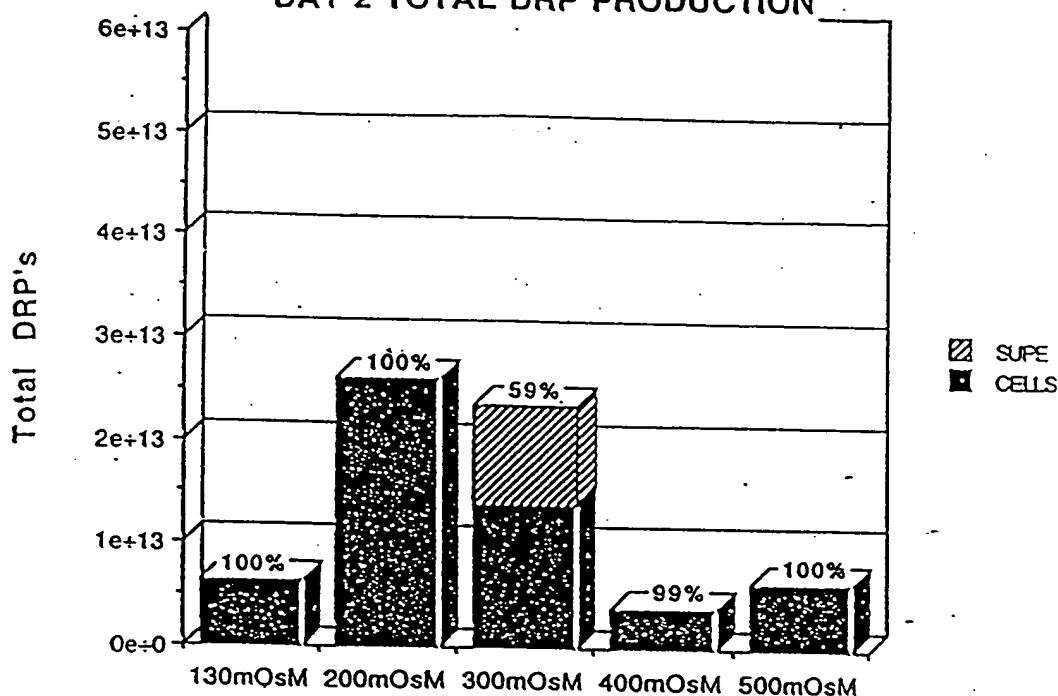


Figure 17

**A** CFTR JL-14 BIOREACTOR EXPERIMENT  
 INITIAL PRODUCTION OSMOLALITY  
 DAY 2 TOTAL DRP PRODUCTION



**B** CFTR JL-14 BIOREACTOR EXPERIMENT  
 INITIAL PRODUCTION OSMOLALITY  
 DAY 3 TOTAL DRP PRODUCTION

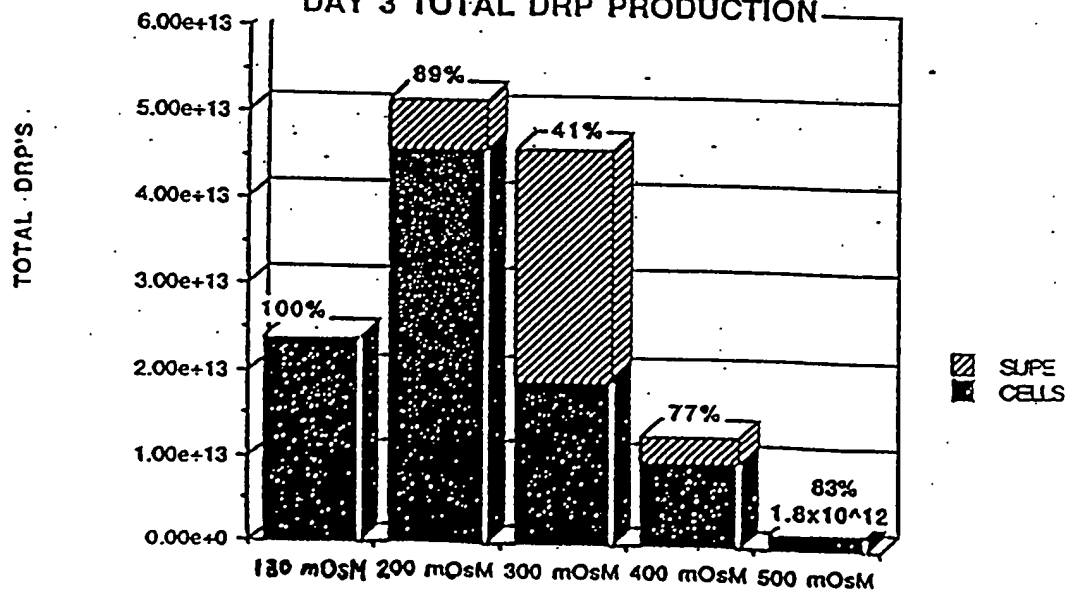


Figure 18

CFTR JL-14 BIOREACTOR EXPERIMENT  
 INITIAL PRODUCTION OSMOLALITY  
 DAY 4 TOTAL DRP PRODUCTION

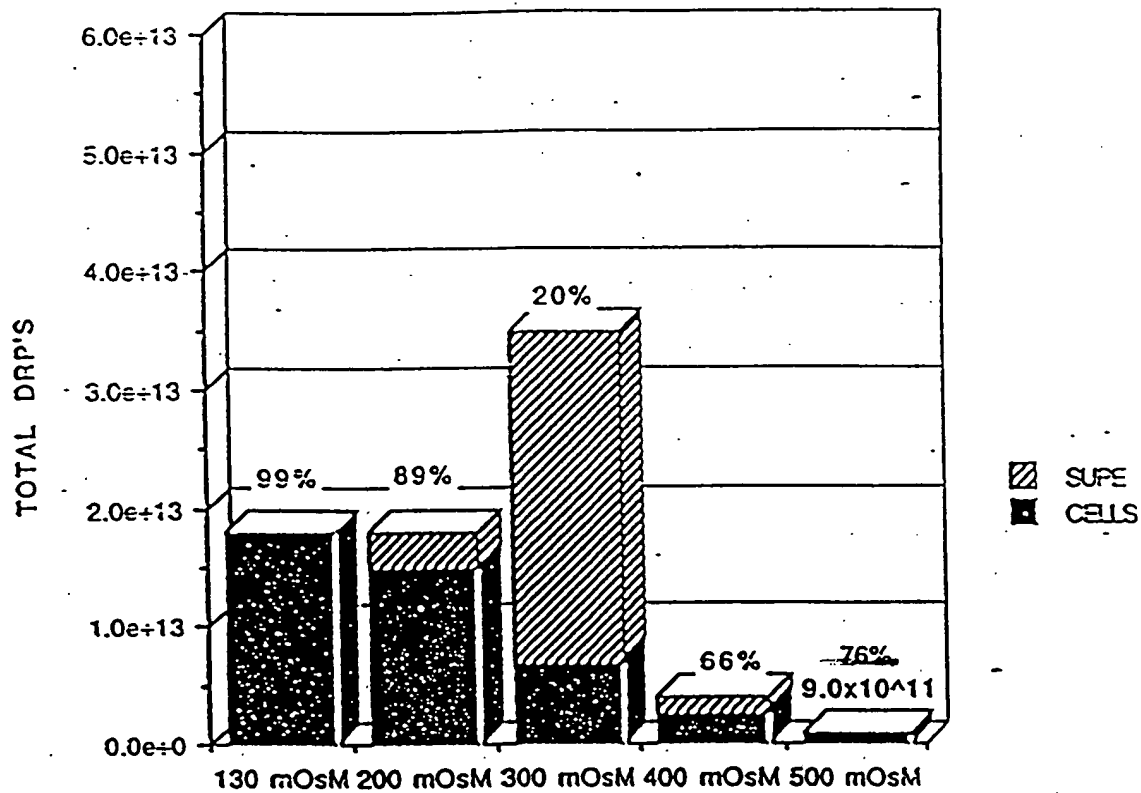
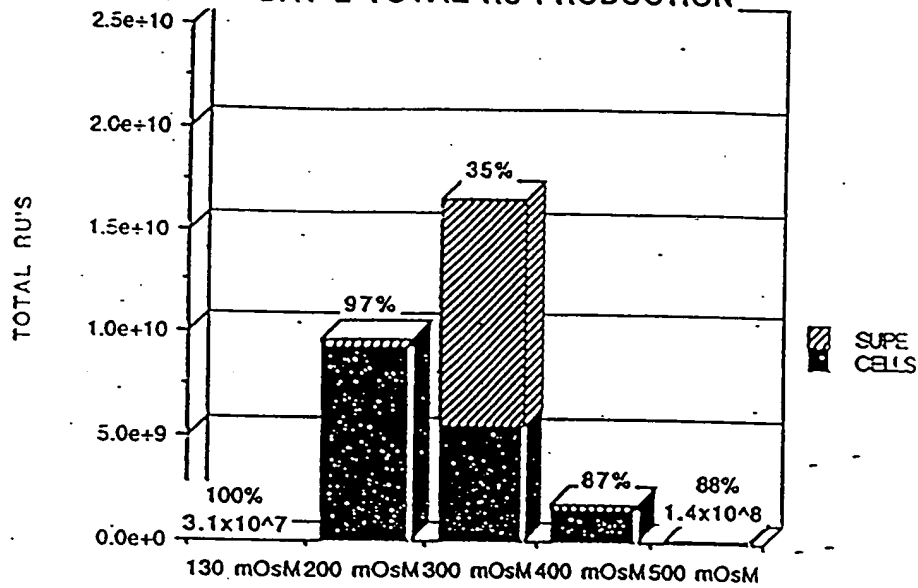


Figure 18C

**A** CFTR JL-14 BIOREACTOR EXPERIMENT  
INITIAL PRODUCTION OSMOLALITY  
DAY 2 TOTAL RU PRODUCTION



**B** CFTR JL-14 BIOREACTOR EXPERIMENT  
INITIAL PRODUCTION OSMOLALITY  
DAY 3 TOTAL RU PRODUCTION

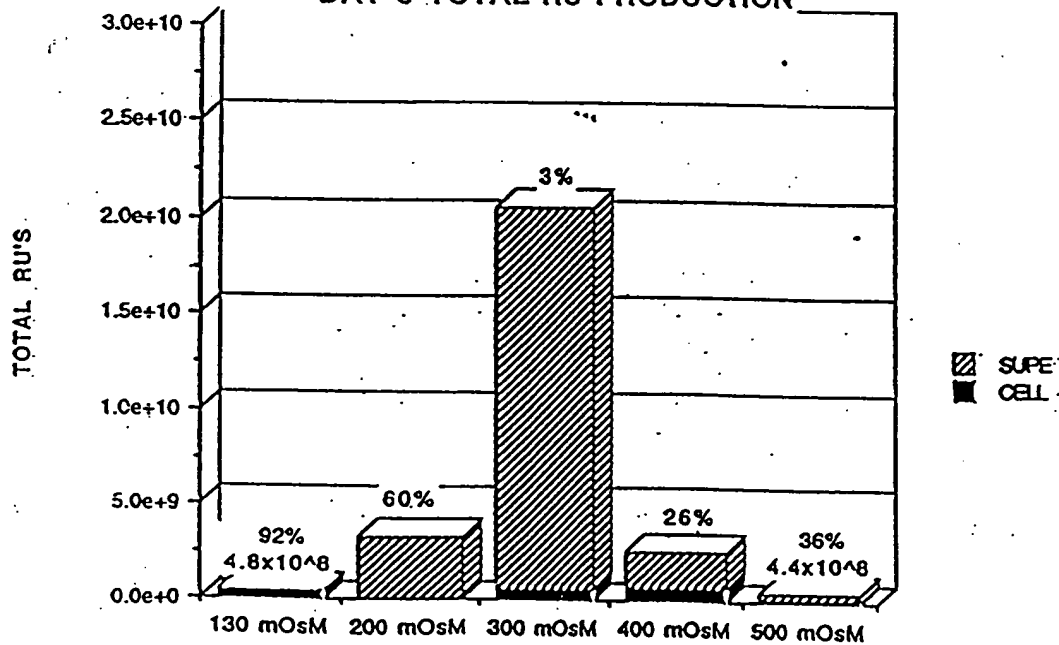


Figure 19

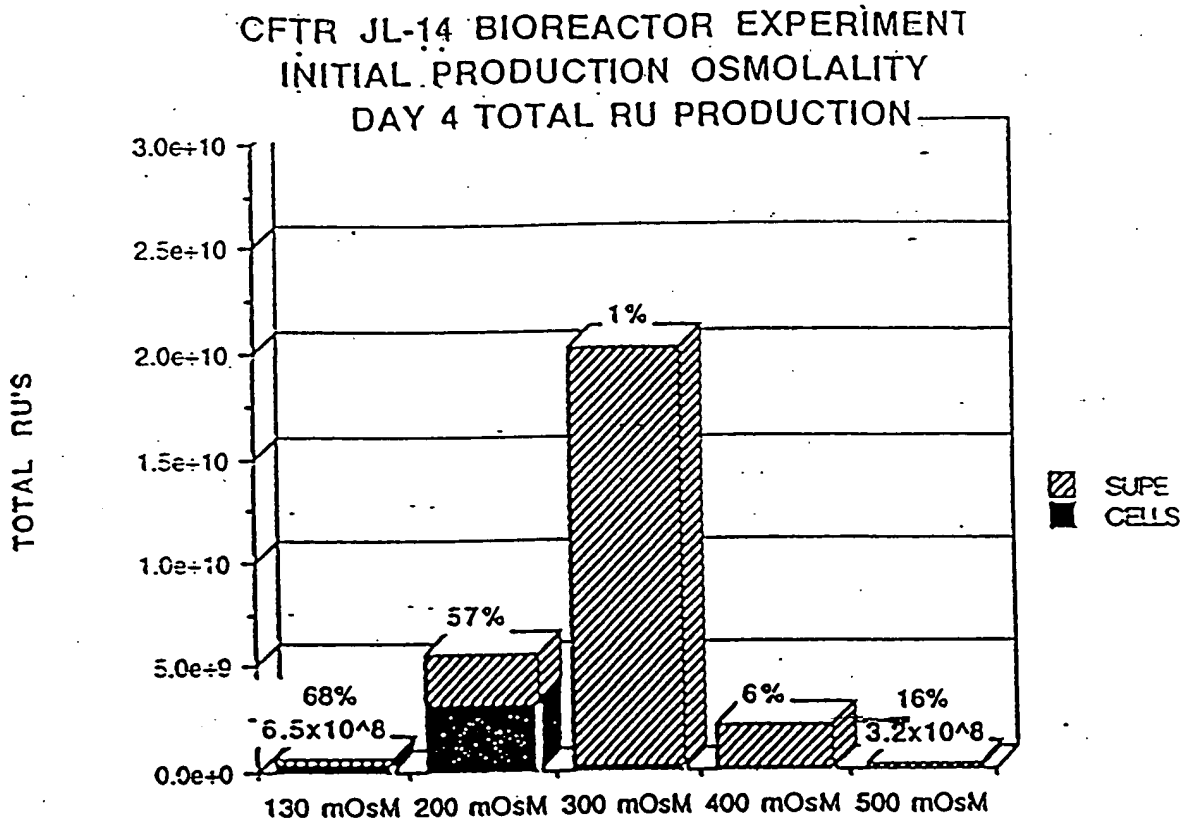


Figure 19C

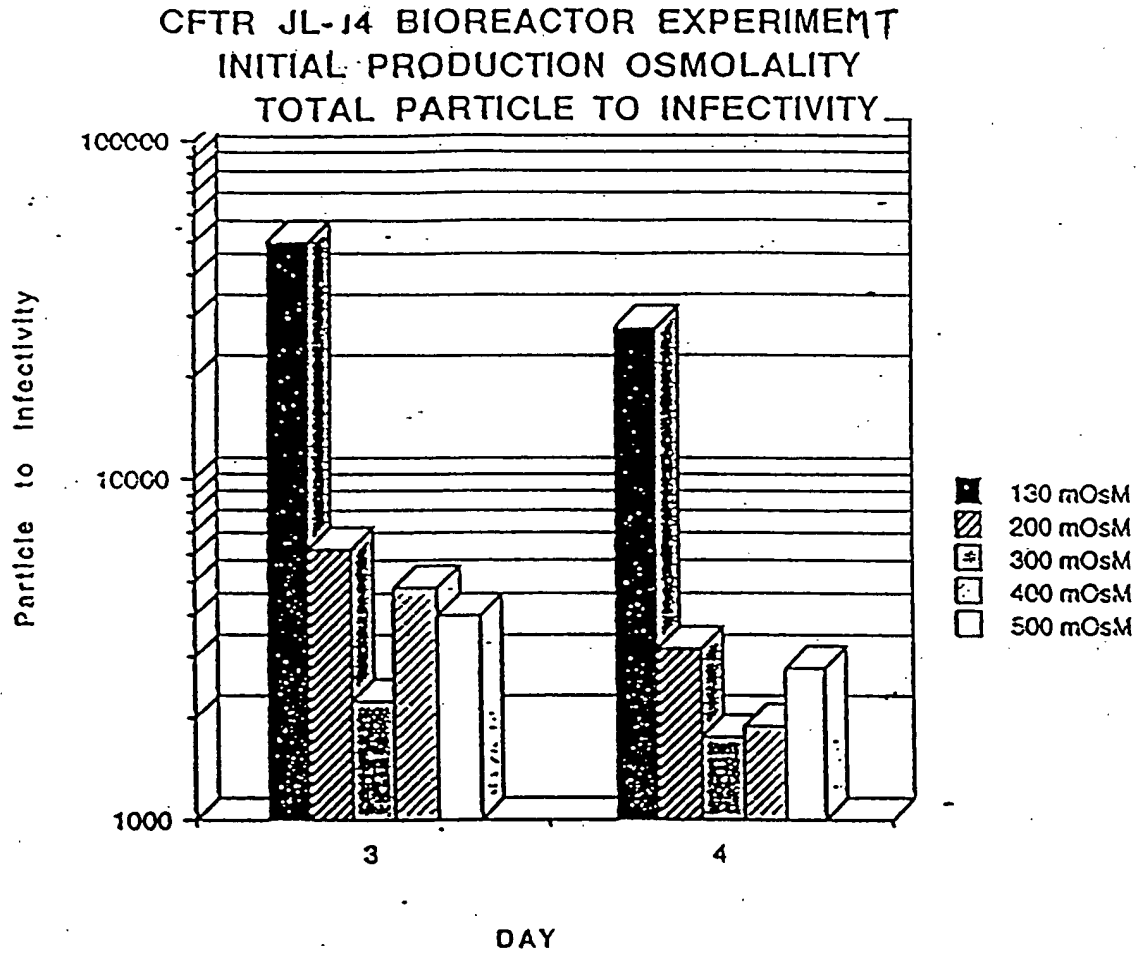
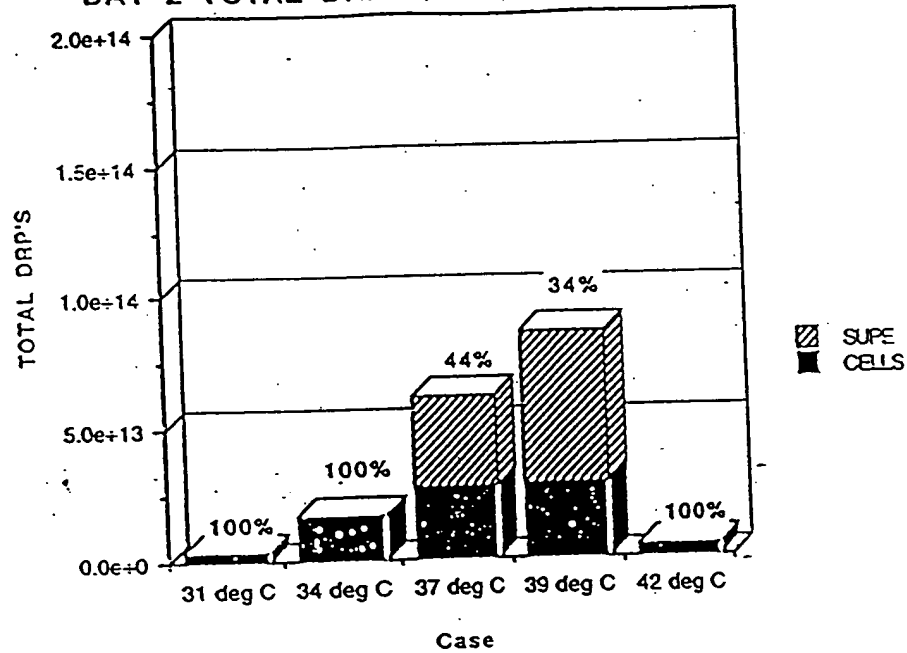


Figure 20

A

CFTR JL-14 REACTOR EXP. TEMPERATURE  
 DAY 2 TOTAL DNASE RESISTANT PARTICLES



B

CFTR JL-14 REACTOR EXP. TEMPERATURE  
 DAY 3 TOTAL DNASE RESISTANT PARTICLES

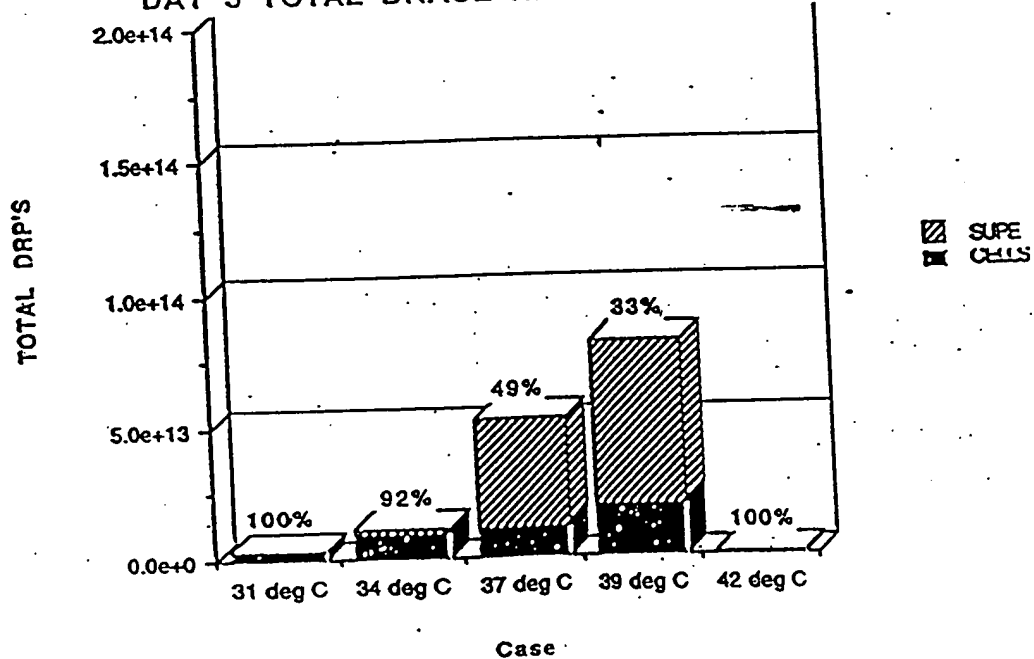


Figure 21

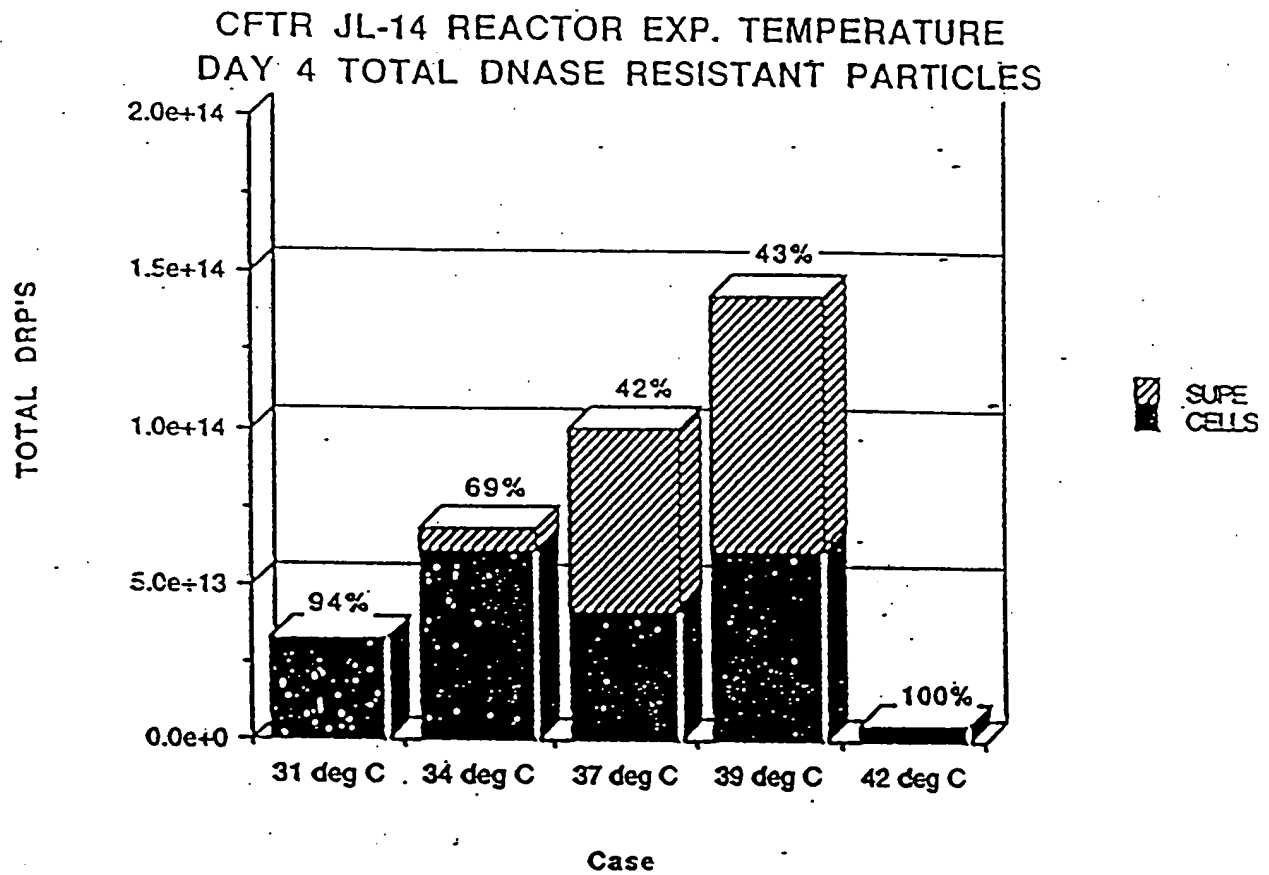


Figure 21C



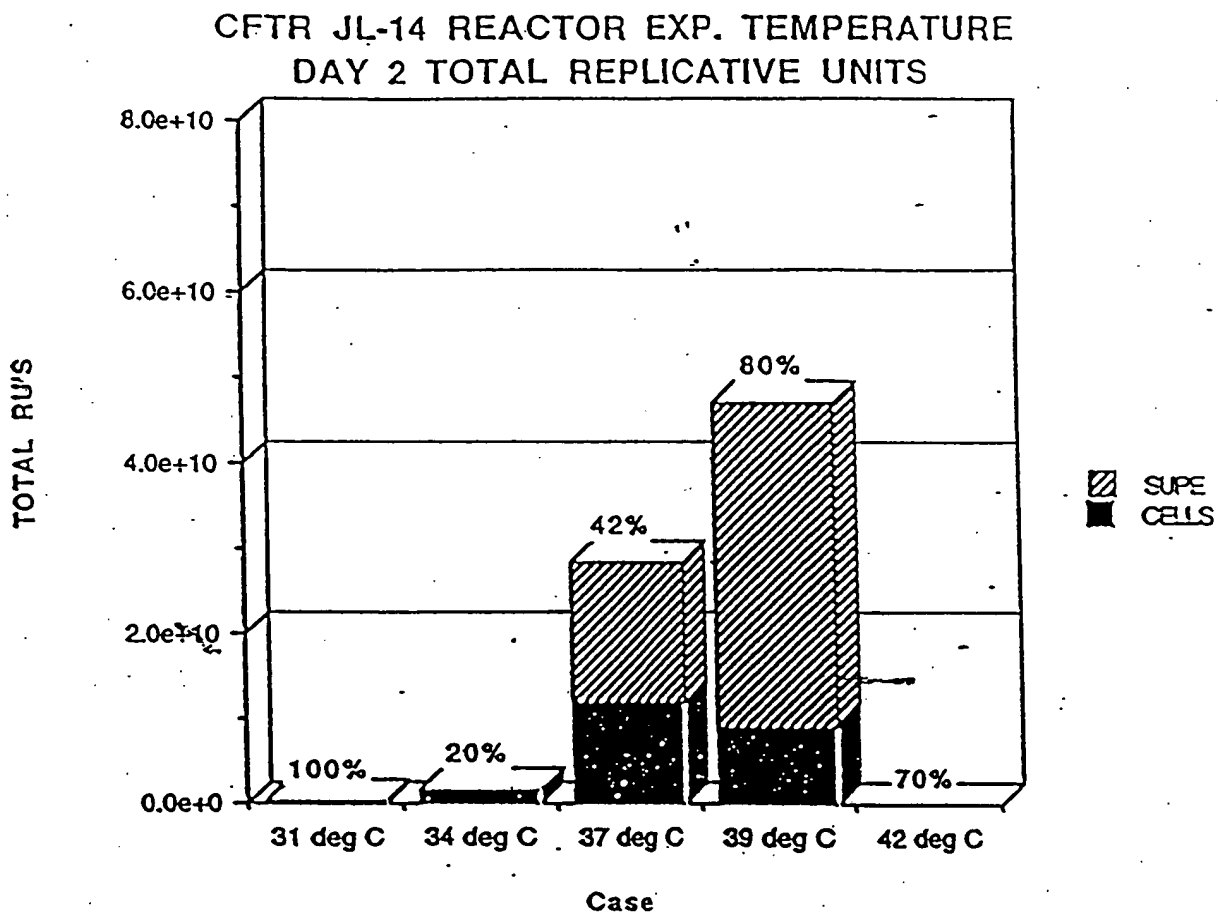
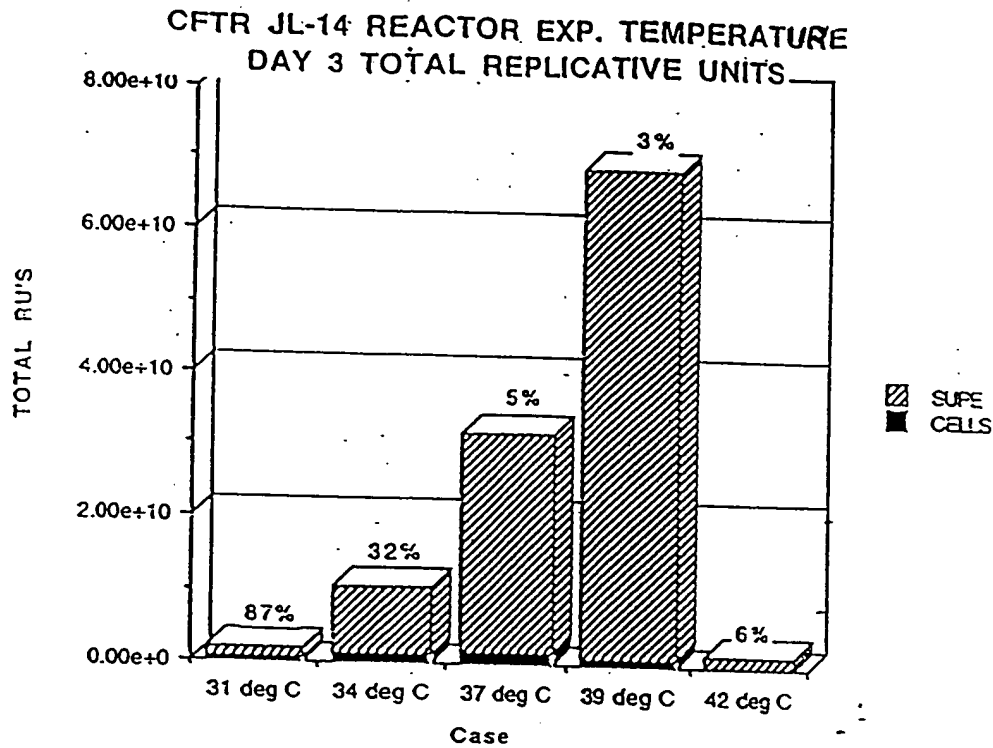
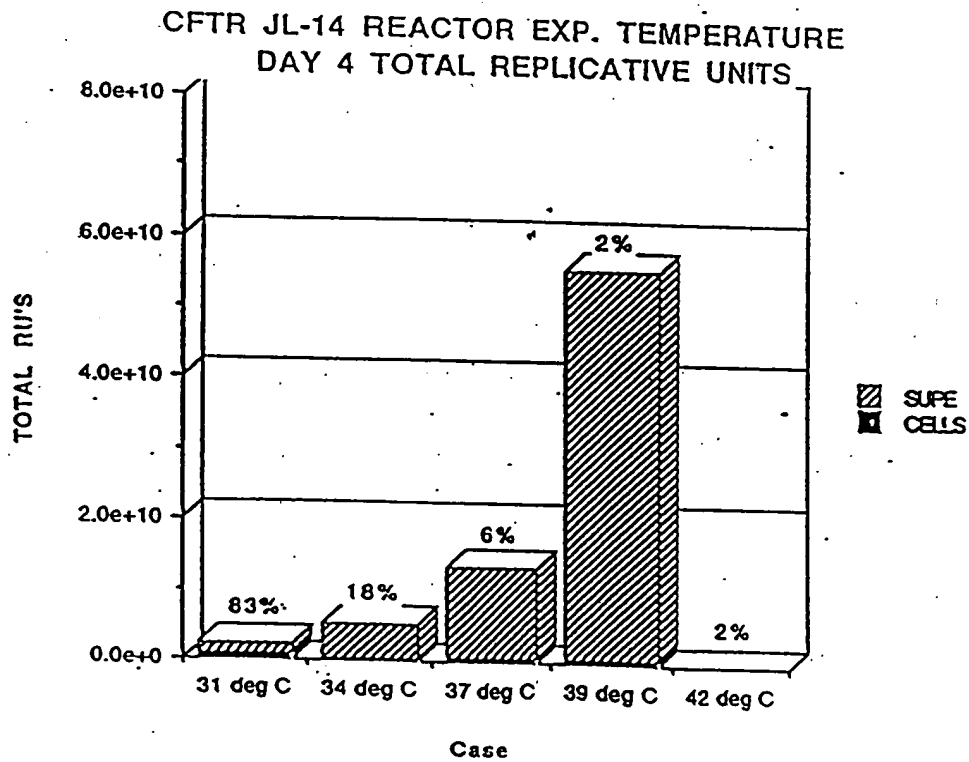


Figure 22A

B



C



Figures 22B and 22C

1000048-103001

### CFTR JL-14 Feed Experiment II Total DRP's - Day 3 Supe

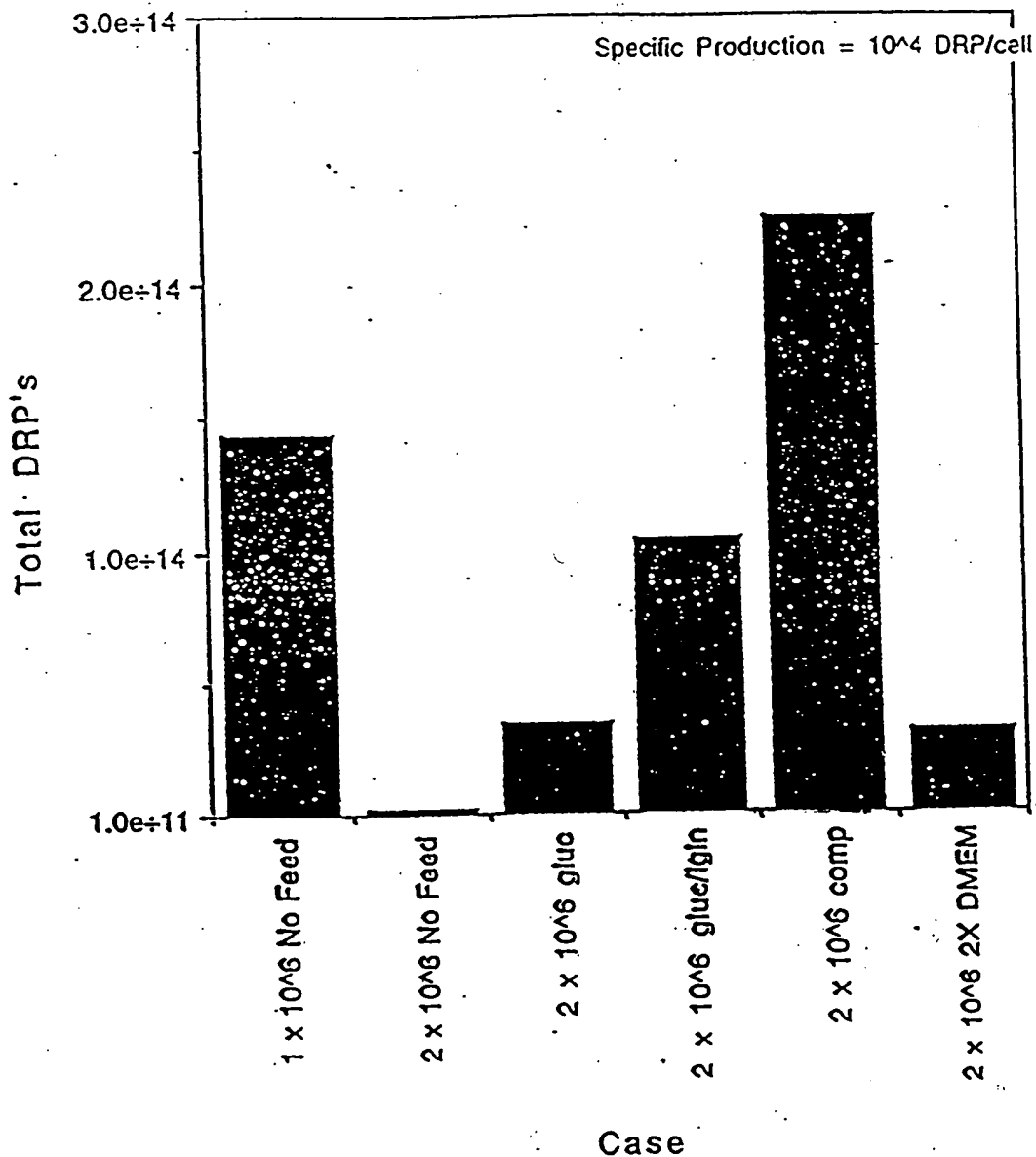


Figure 23

### CFTR JL-14 Feed Experiment II Total RU's - Day 3 Supe

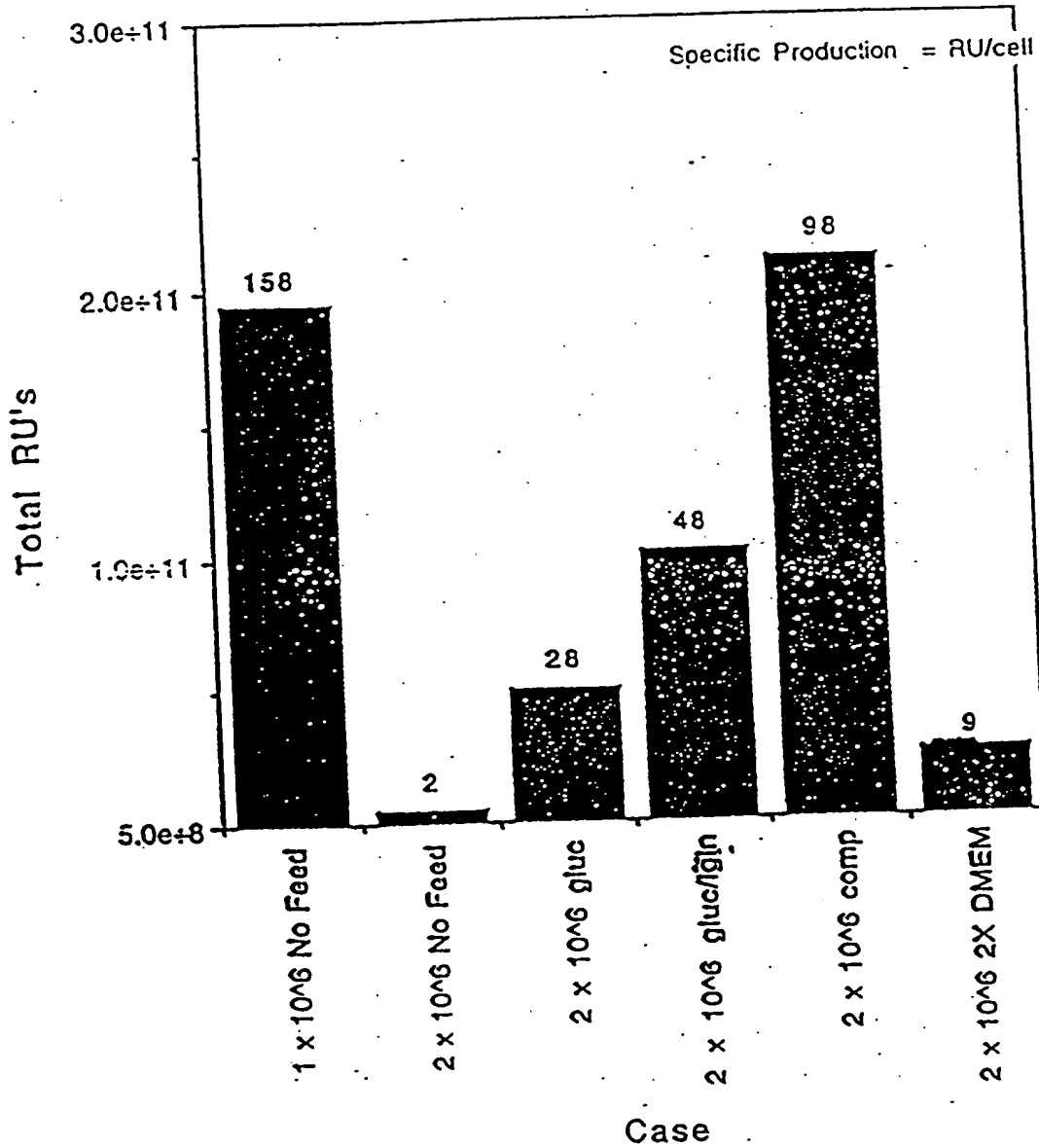


Figure 24

CFTR JL-14 Feed Experiment II.  
P/I ratio - Day 3 Supe

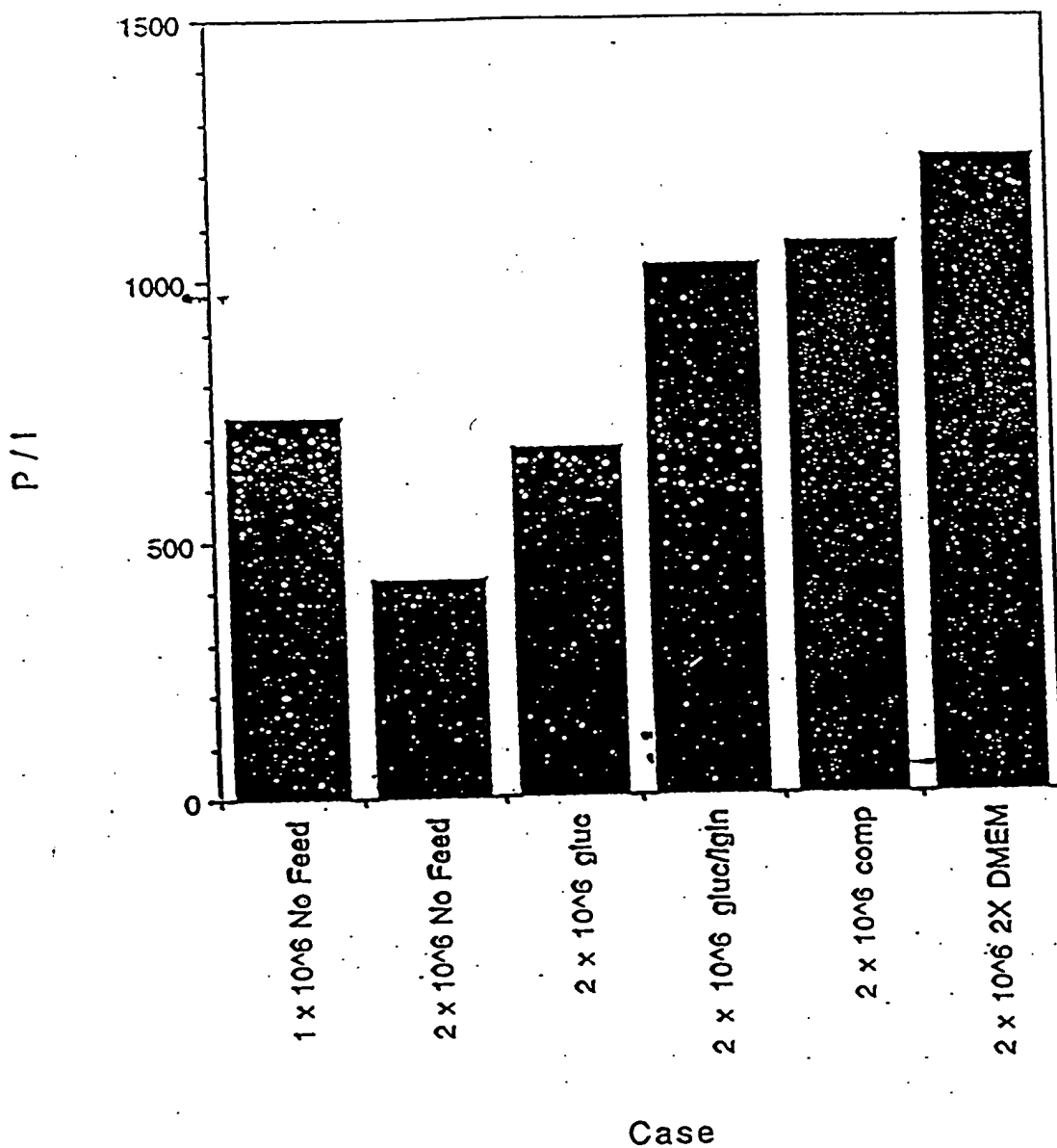


Figure 25

Lactalbumin Hydrolysate w/Earle's Salts (ELH)		
Base Cat No.	11250	11800
Component	XLiquid mg/L	Powder mg/L
INORGANIC SALTS:		
CaCl <sub>2</sub> (anhyd.)	200.00	200.00
KCl	400.00	400.00
MgSO <sub>4</sub> (anhyd.)	97.67	97.70
NaCl	6800.00	6800.00
NaHCO <sub>3</sub>	2200.00	-
NaH <sub>2</sub> PO <sub>4</sub> · H <sub>2</sub> O	140.00	140.00
OTHER COMPONENTS:		
D-Glucose	1000.00	1000.00
Lactalbumin Hydrolysate	6500.00	5000.00
Phenol Red	10.00	10.00

MEM Amino Acids Solutions <sup>2</sup>		
Base Cat No.	11136	21135
Component	50X Liquid	50X Liquid
AMINO ACIDS:		
	mg/L	mg/L
L-Arginine	6320.00	6320.00
L-Cystine	1200.00	1200.00
L-Glutamine	-	14600.00
L-Histidine-HCl-H <sub>2</sub> O	2100.00	2100.00
L-Isoleucine	2625.00	2625.00
L-Luecine	2620.00	2620.00
L-Lysins HCl	3625.00	3625.00
L-Methionine	755.00	755.00
L-Phenylalanine	1650.00	1650.00
L-Threonine	2380.00	2380.00
L-Tryptophan	510.00	510.00
L-Tyrosine	1800.00	1800.00
L-Valine	2340.00	2340.00

References:

1. Eagle, H. (1955) Proc. Soc. Exp. Biol. Med. 89, 362.
2. Eagle, H. (1959) Science 130, 432

MEM Non-Essential Amino Acids Solution <sup>2</sup>	
Base Cat No.	11140
Component	100X Liquid mg/L
AMINO ACIDS:	
L-Alanine	890.00
L-Asparagine	1500.00
L-Aspartic	1330.00
L-Glutamine	1470.00
Glycine	750.00
L-Proline	1150.00
L-Serine	1050.00

MEM Vitamin Solutions <sup>2</sup>	
Base Cat No.	11120
Component	50X Liquid mg/L
NaCl	8500.00
D-Ca Pantothenate	100.00
Choline Chloride	100.00
Folic Acid	100.00
I-Inositol	200.00
Nicotinamide	100.00
Pyridoxal-HCl	100.00
Riboflavin	10.00
Thiamine HCl	100.00

Figure 26

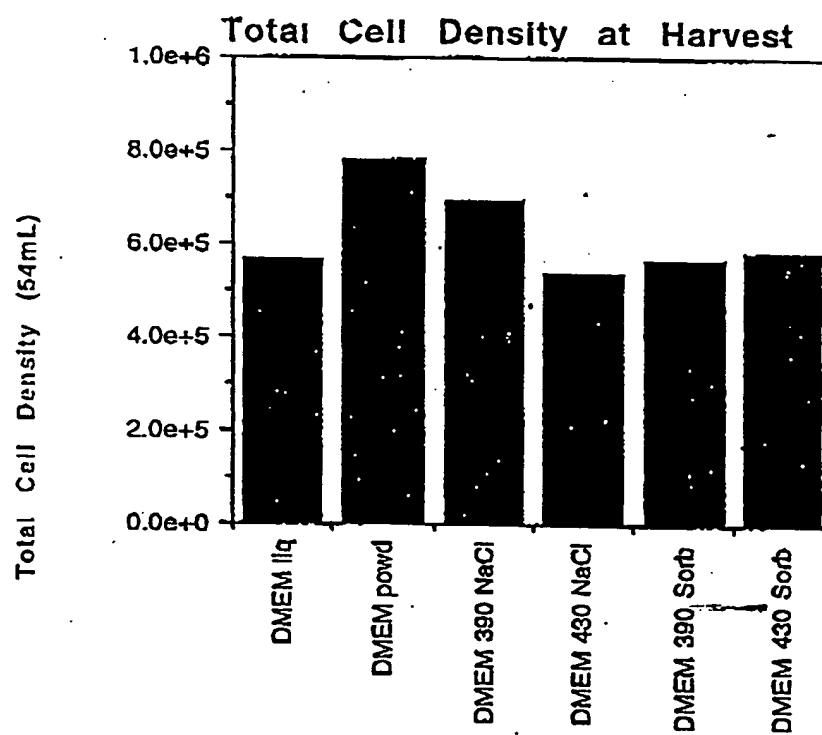


Figure 27

□ % Supernatant  
 ■ % Cells

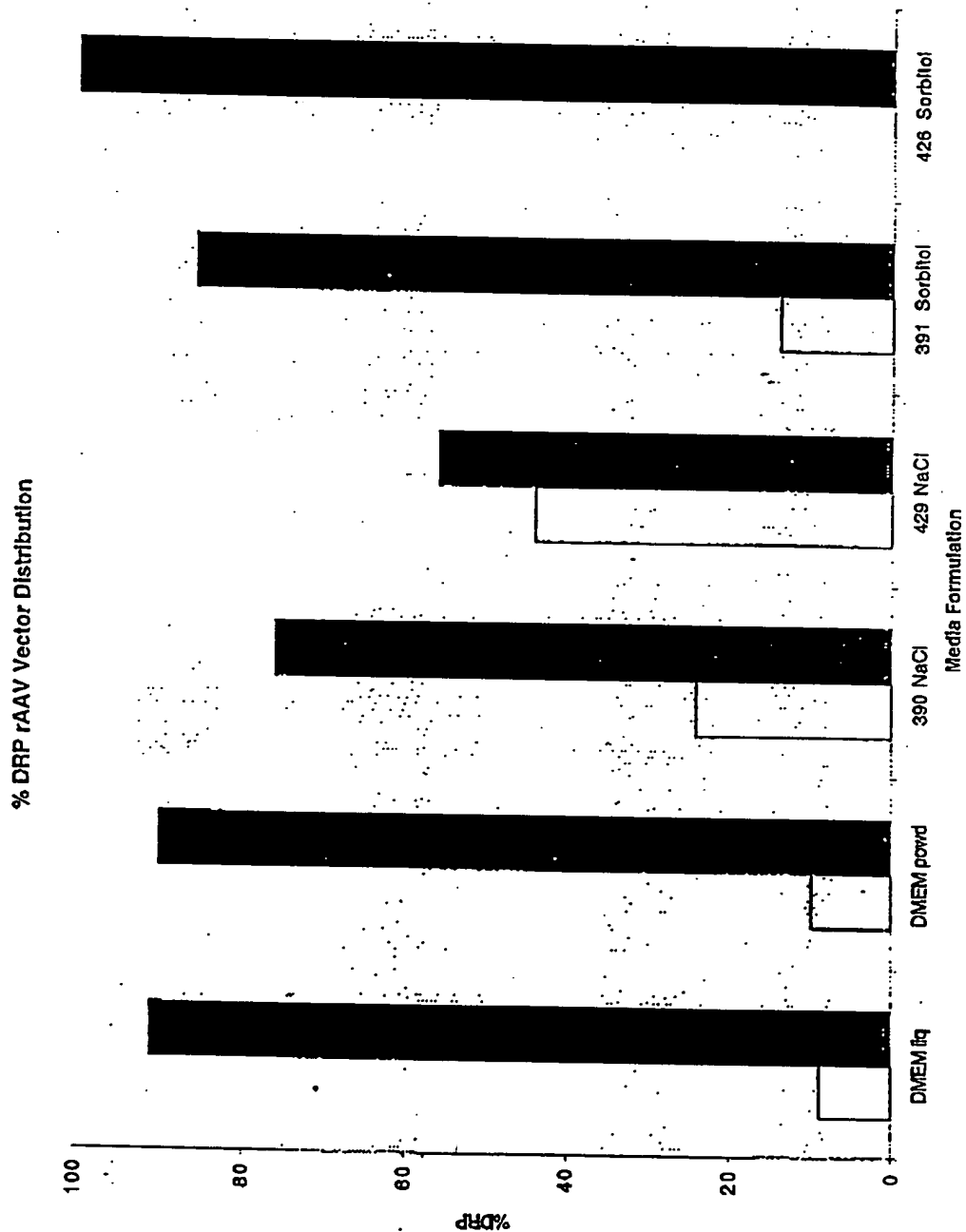


Figure 28



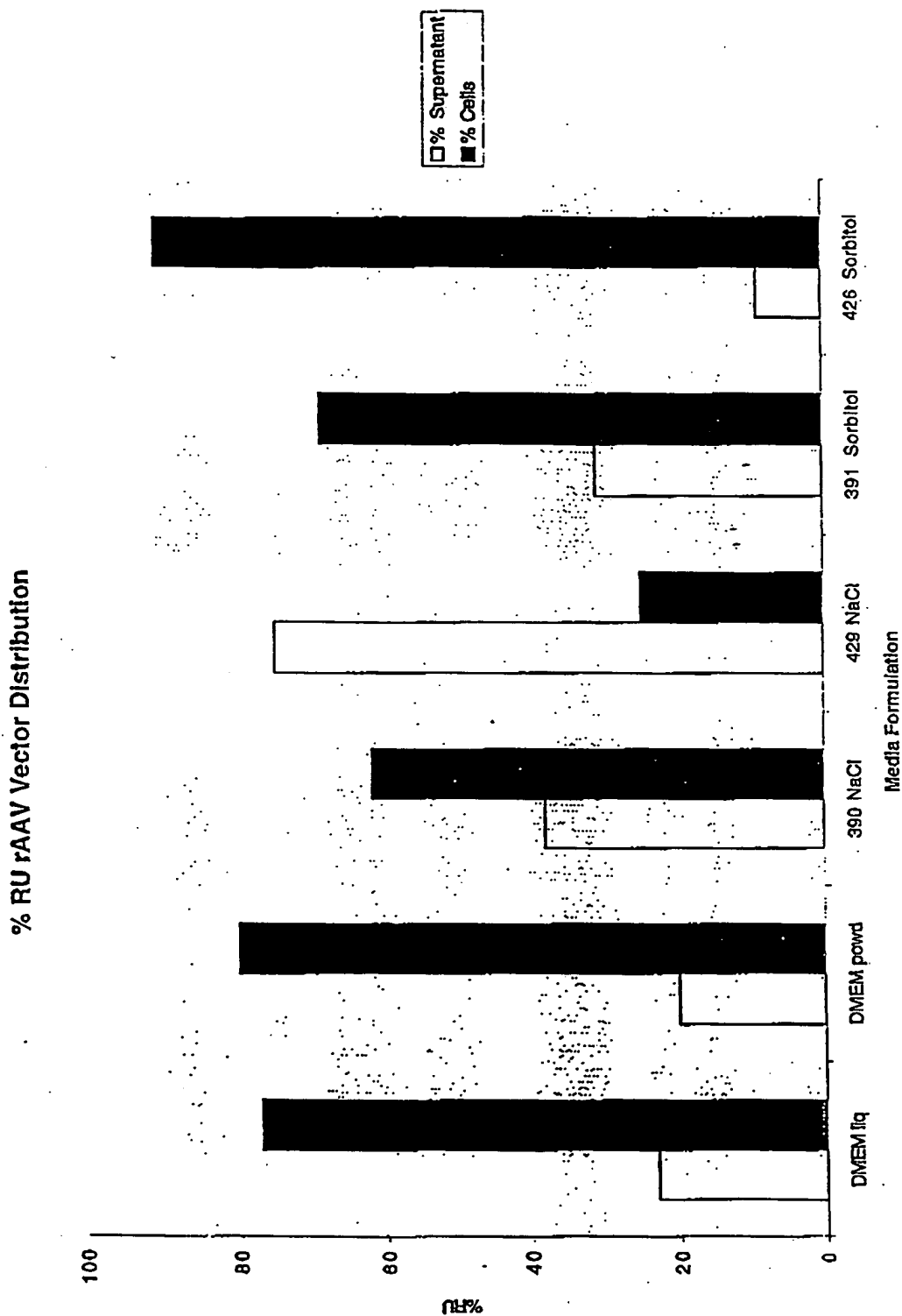


Figure 29

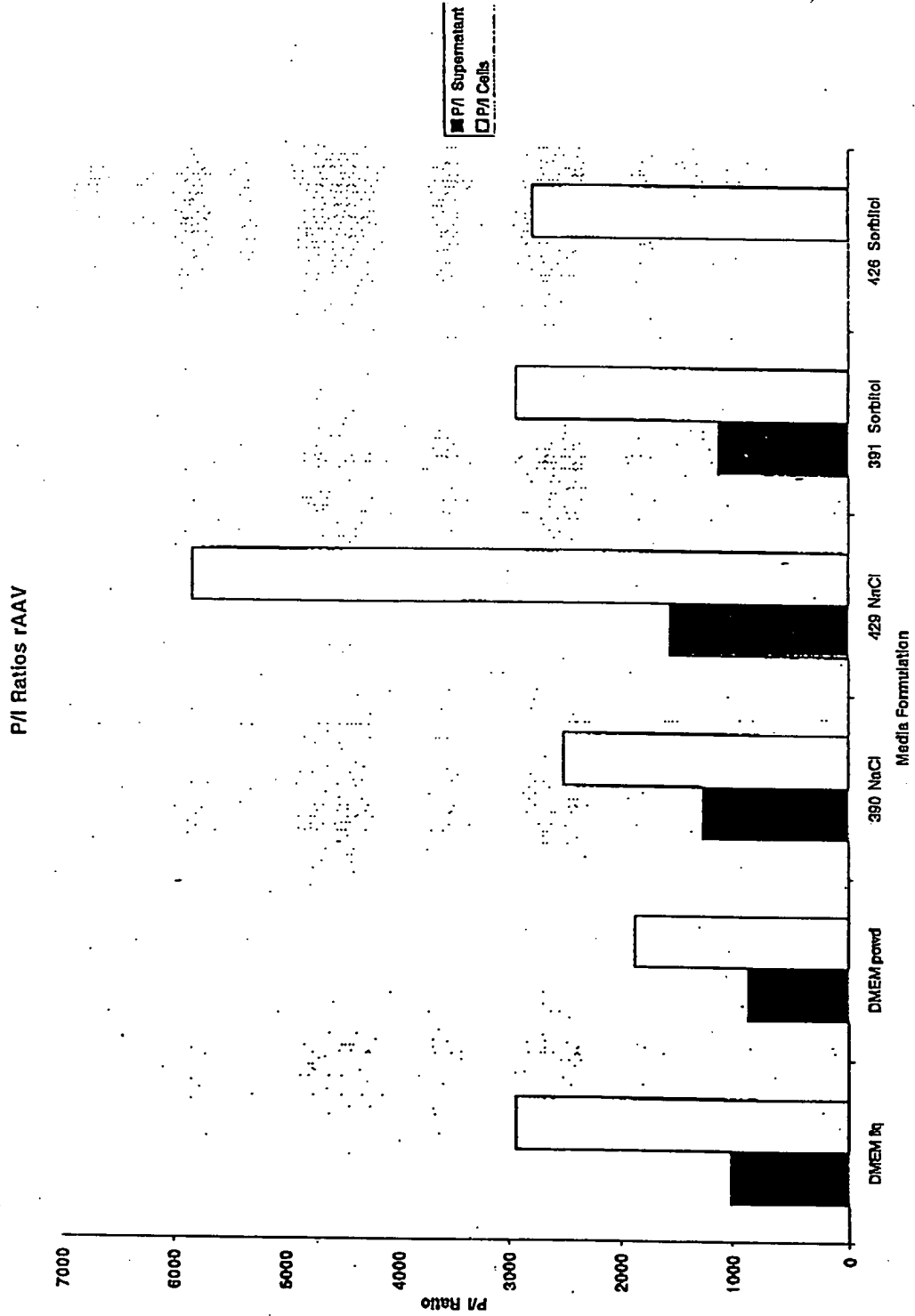
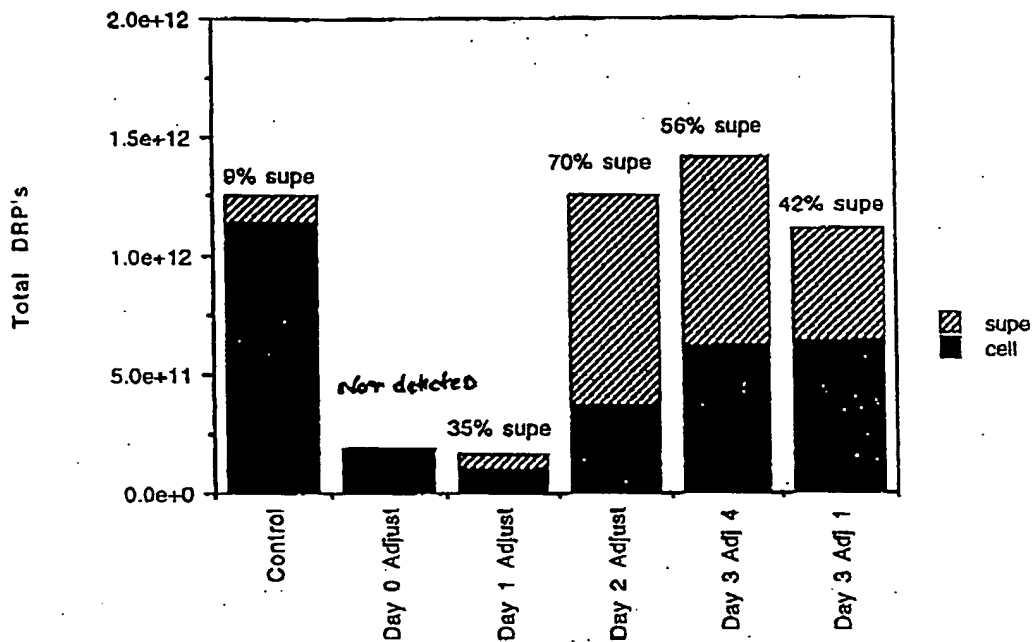


Figure 30

A

**Daily Salt Adjustment T-Flask**  
**Total DRP's with C II and Sup Dist.**



B

**Daily Salt Adjustment T-Flask**  
**Total RU's with Cell and Supe Dist.**

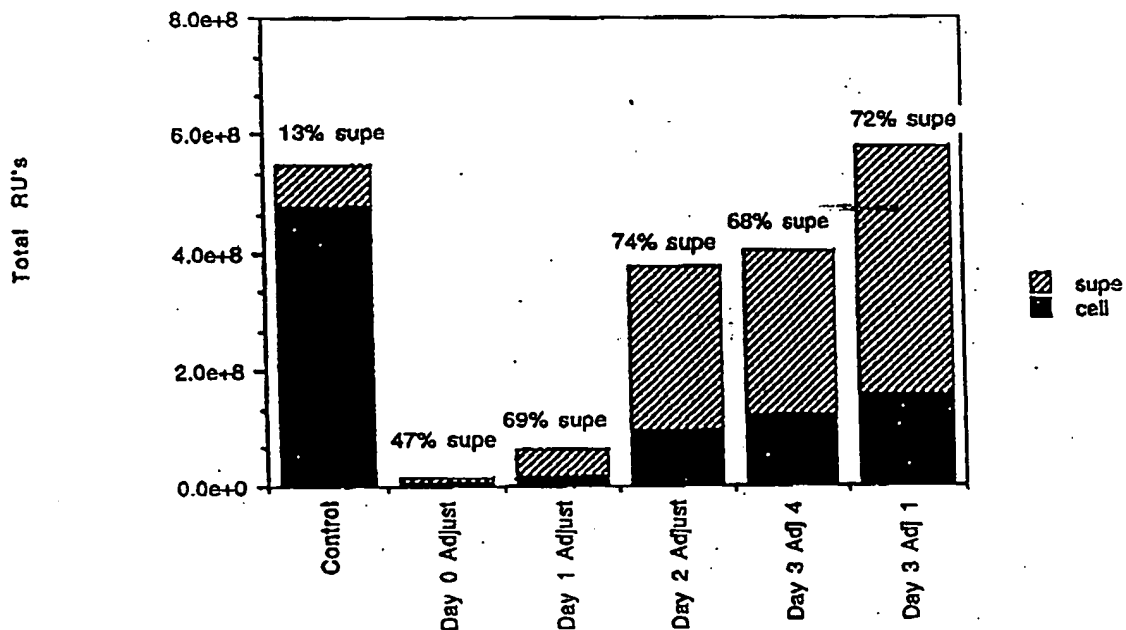


Figure 31

### Daily Salt Adjustment T-Flask Particle to Infectivity Ratio

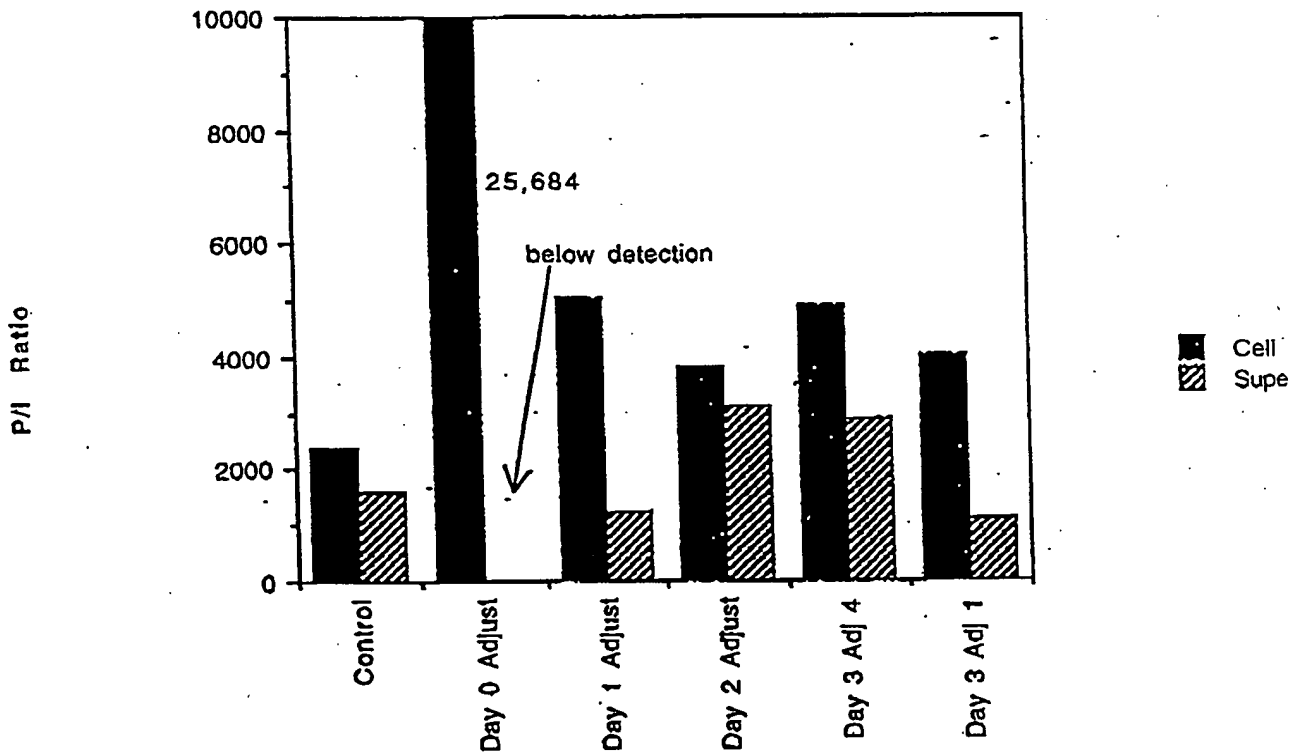


Figure 32

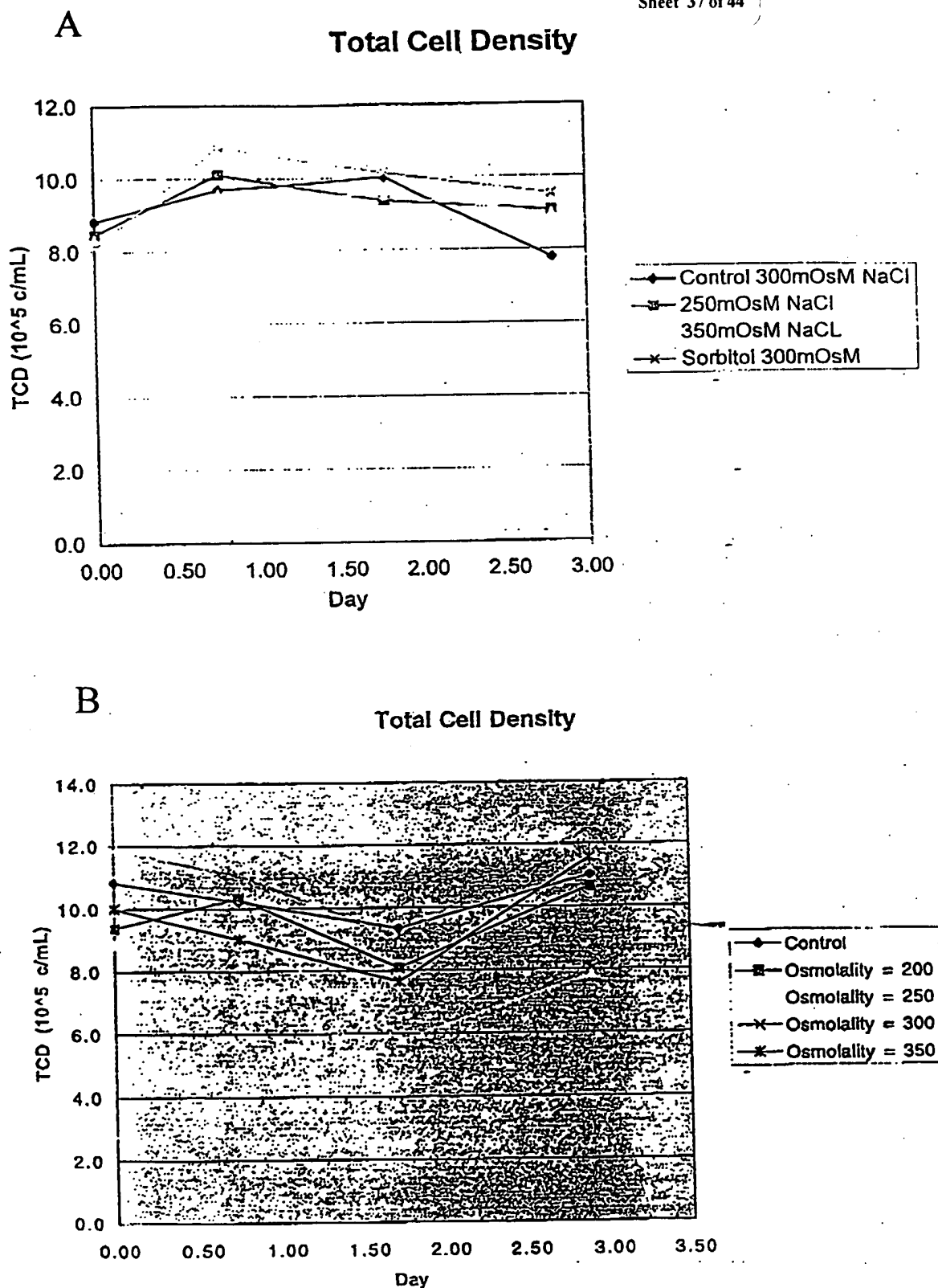
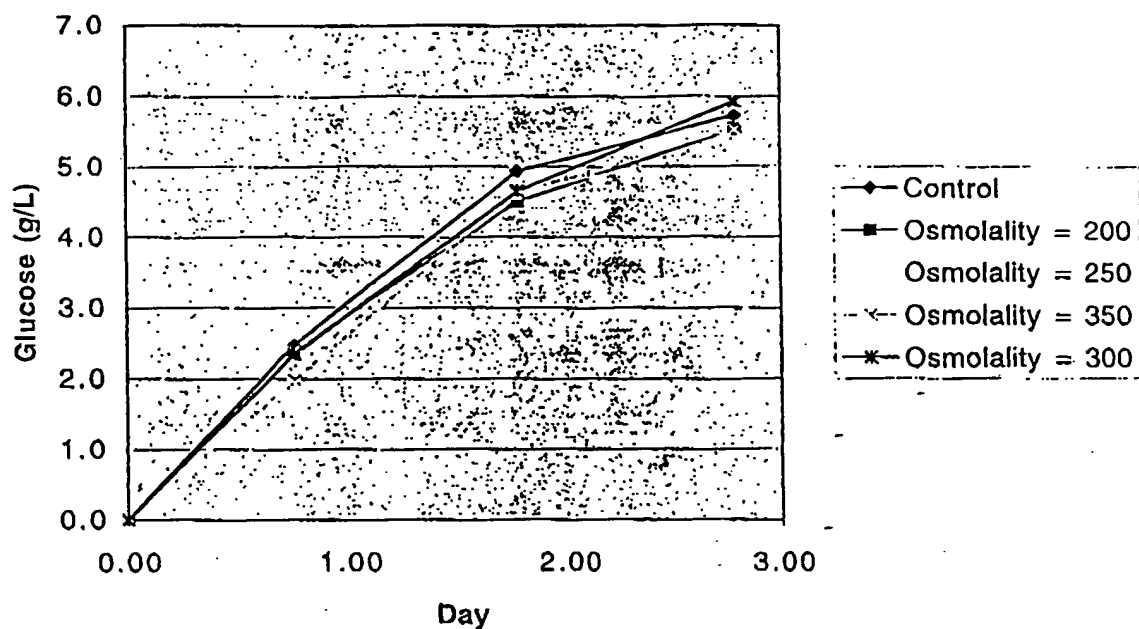


Figure 33

A

### Cumulative Glucose Consumed



B

### Cumulative Glucose Consumed

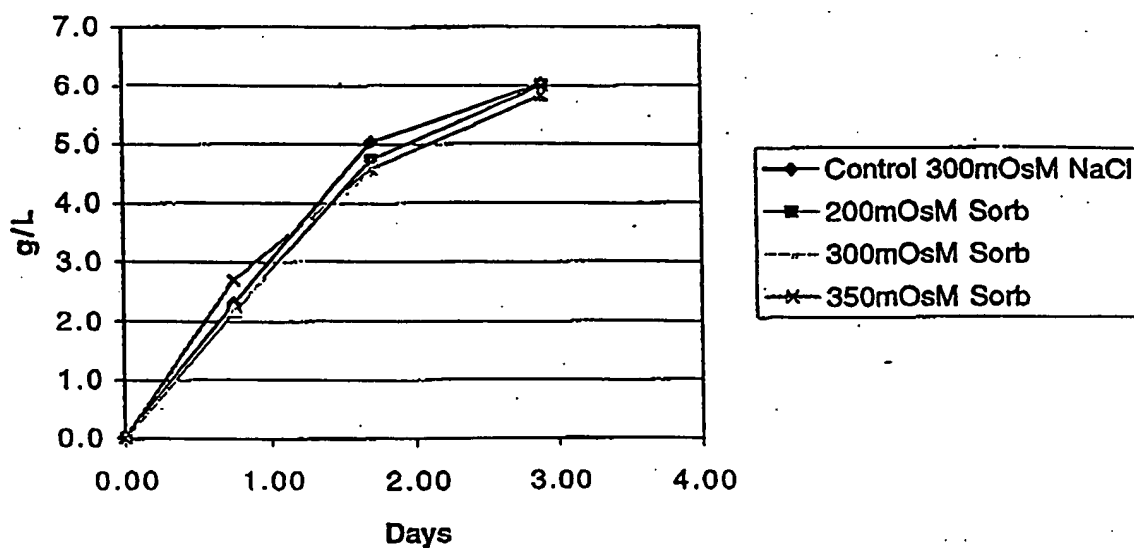
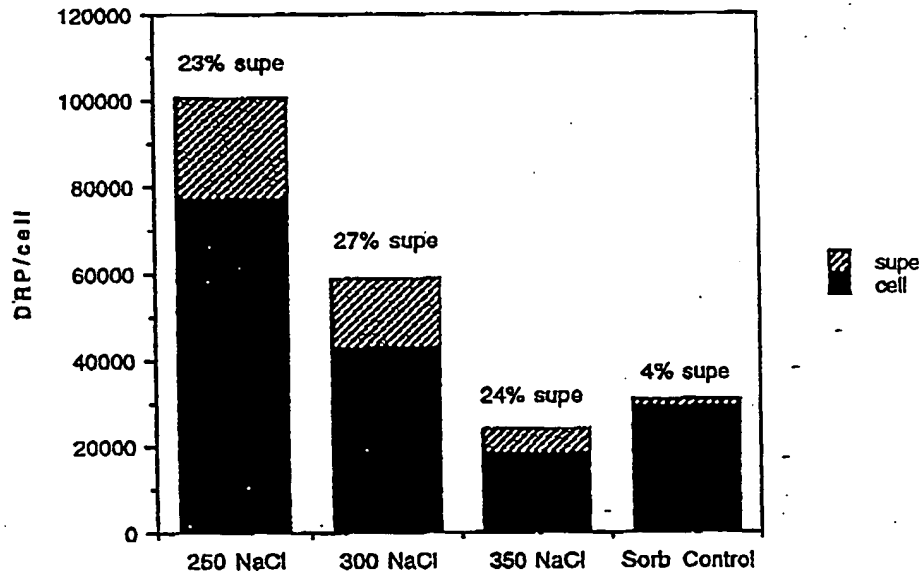


Figure 34

TOOEOT 23402001

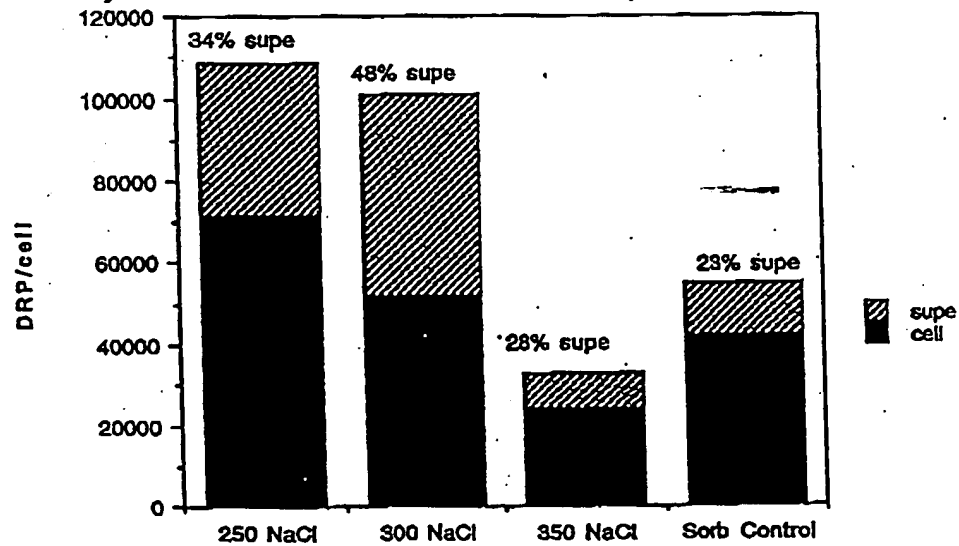
A

**Bioreactor Osmolality Experiment (NaCl)**  
**Day 2 DRP/cell with Cell and Supe Distribution**



B

**Bioreactor Osmolality Experiment (NaCl)**  
**Day 3 DRP/cell with Cell and Supe Distribution**

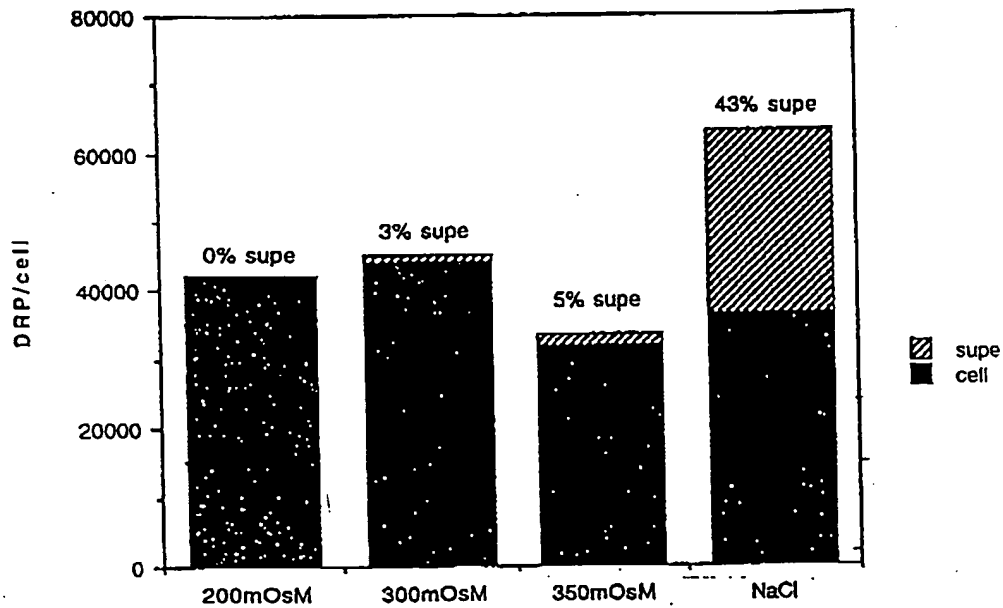


Figures 35A and 35B

T00001-28402001

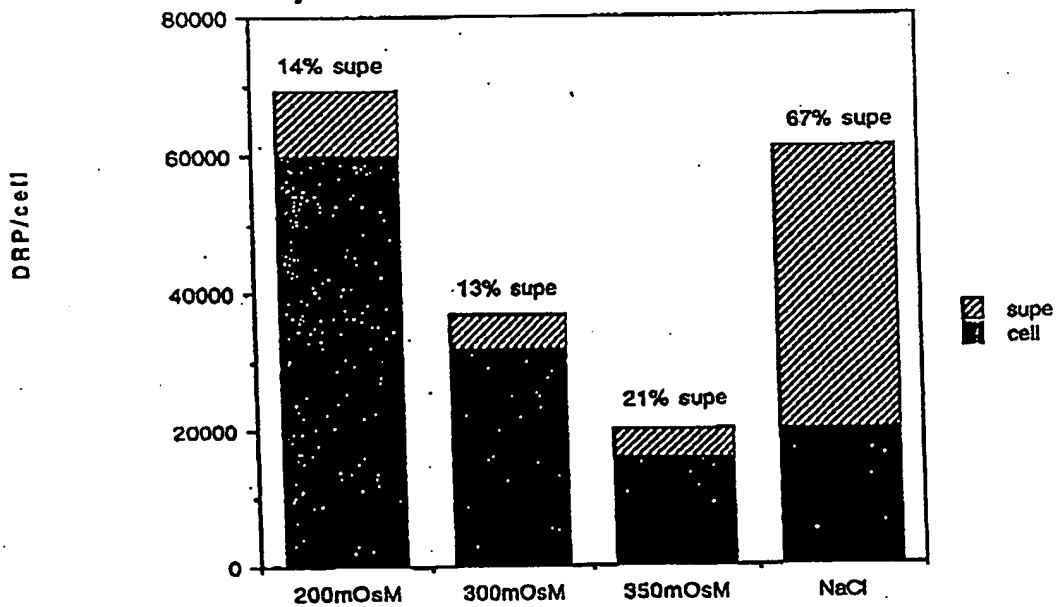
C

**Bioreactor Osmolality Exp. (Sorbitol)**  
**Day 2 DRP/cell C II and Sup Distribution**



D

**Bioreactor Osmolality Exp. (Sorbitol)**  
**Day 3 DRP/cell Cell and Supe Distribution**

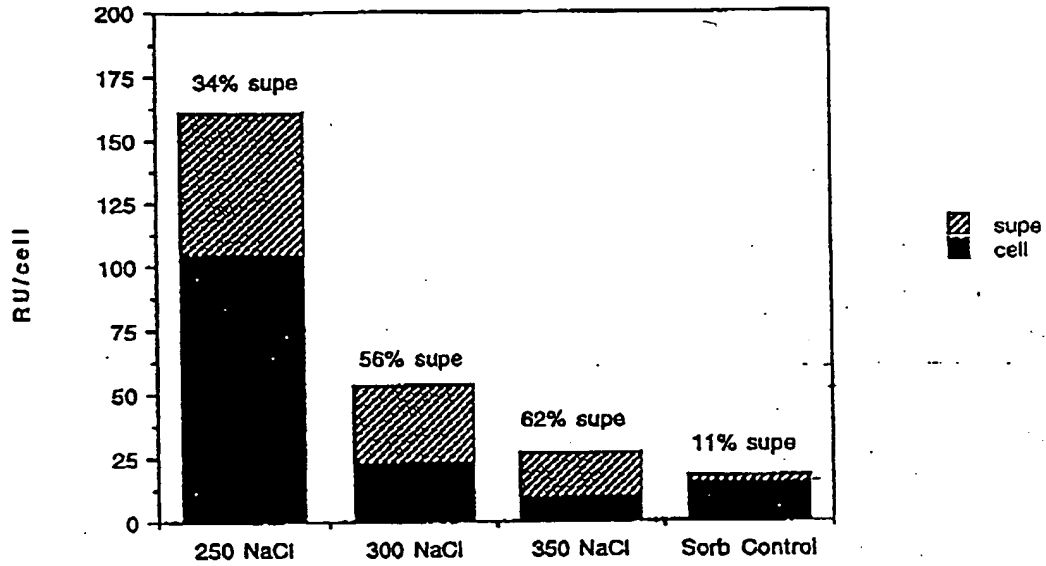


Figures 35C and 35D



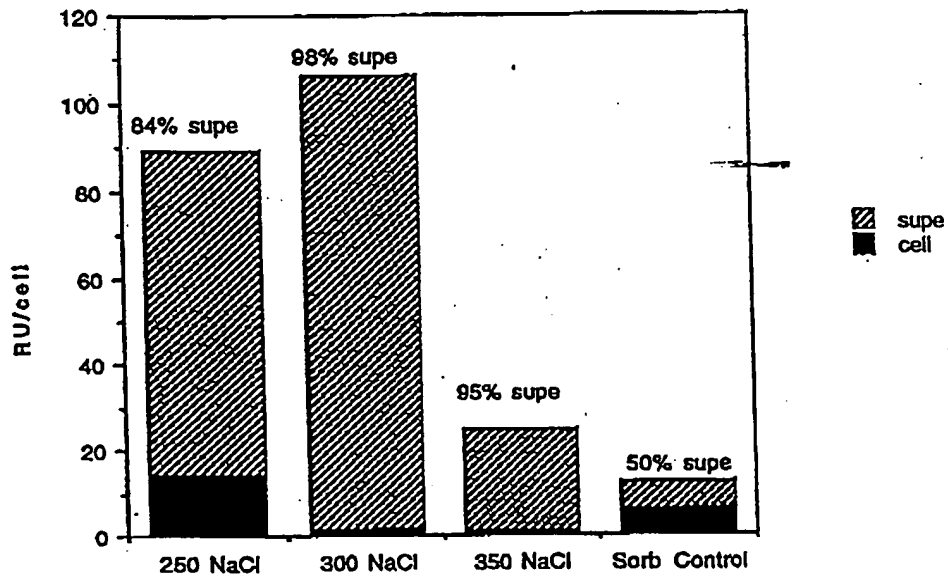
A

**Blor actor Osmolality Exp riment (NaCl)**  
**Day 2 RU/c ll with Cell and Supe Distribution**



B

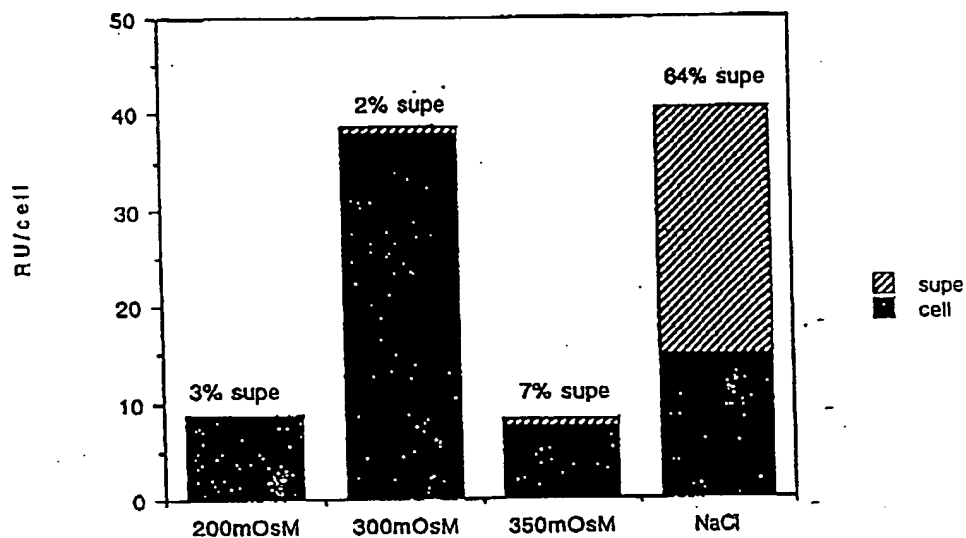
**Bioreactor Osmolality Experiment (NaCl)**  
**Day 3 RU/cell with Cell and Supe Distribution**



Figures 36A and 36B

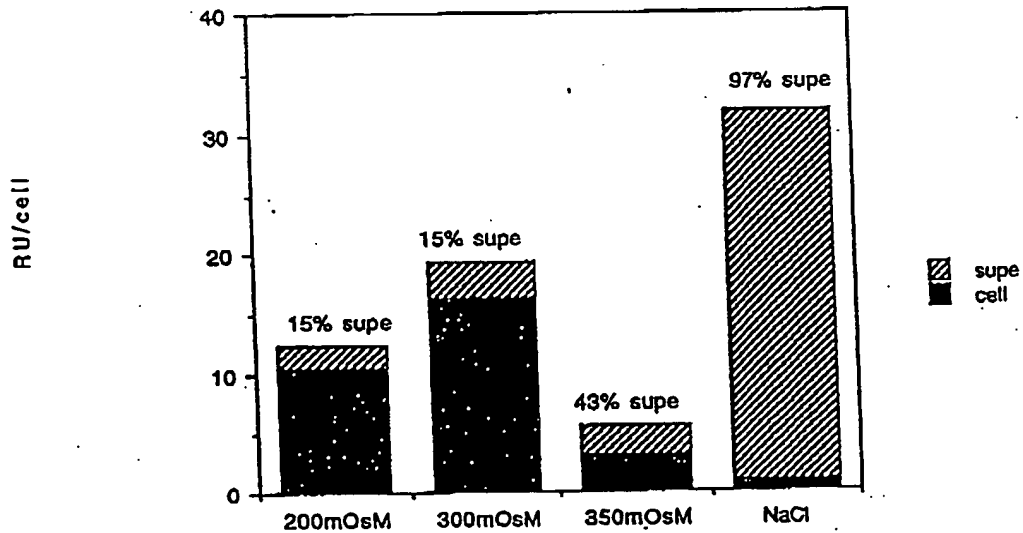
C

Bioreactor Osmolality Exp. (Sorbitol)  
Day 2 RU/cell with Cell and Supe Distribution



D

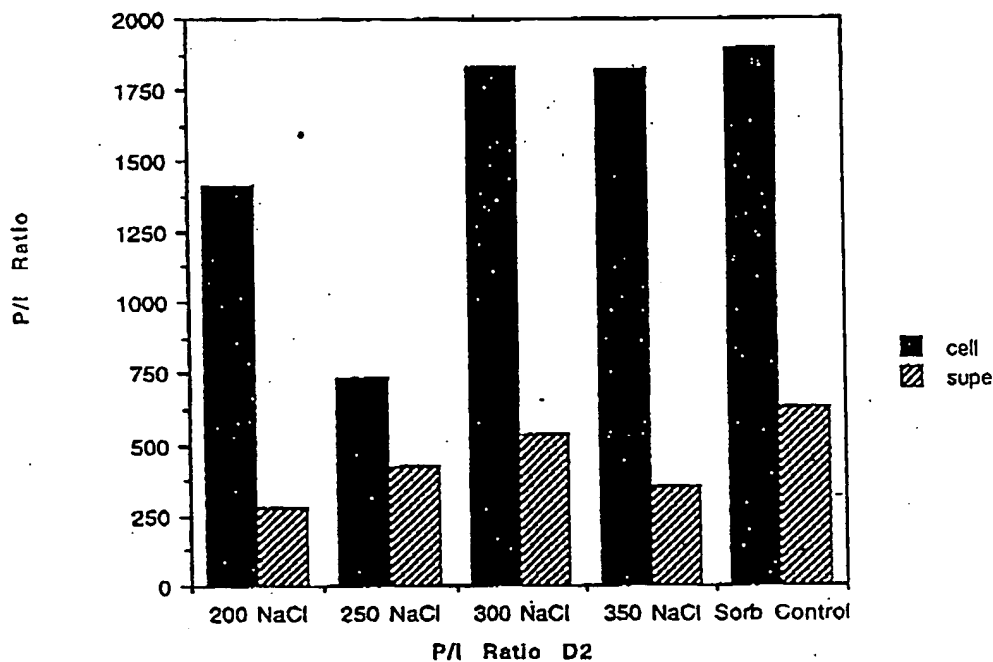
Bioreactor Osmolality Exp (Sorbitol)  
Day 3 RU/cell with Cell and Supe Distribution



Figures 36C and 36D

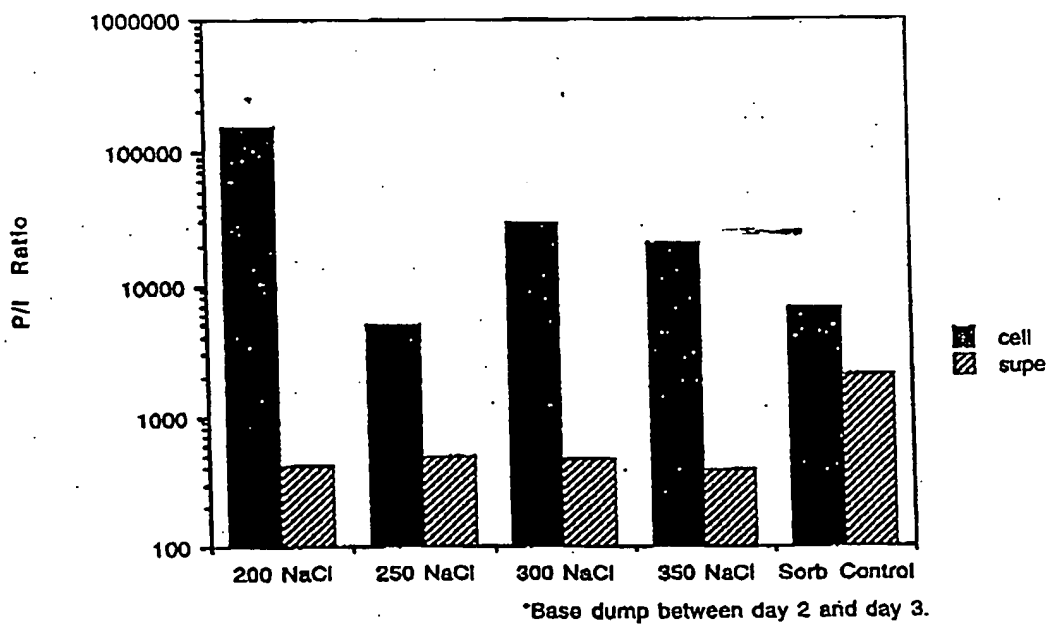
A

**Bioreactor Osmolality Experiment (NaCl)  
 Day 2 Particle to Infectivity Ratio**



B

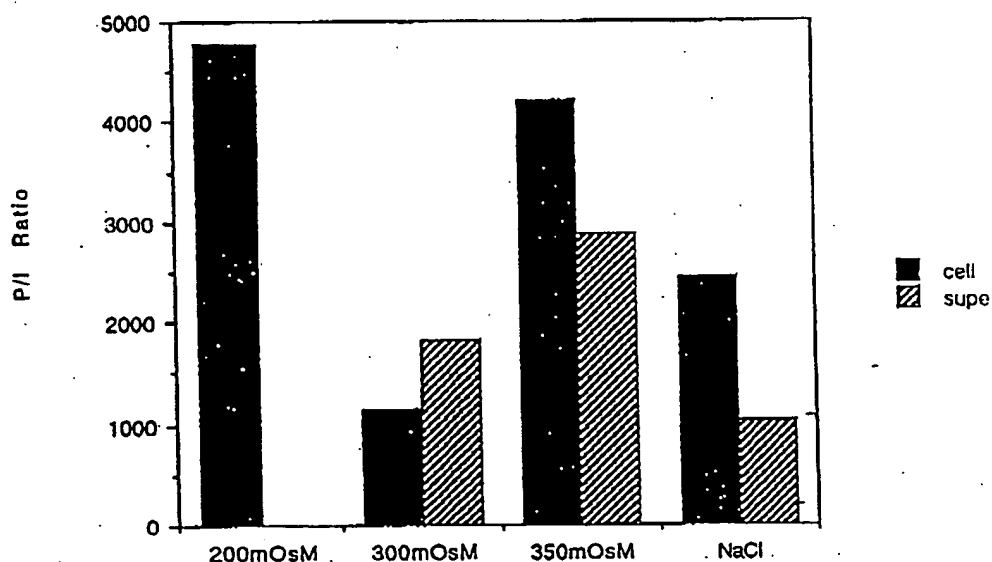
**Bioreactor Osmolality Experiment (NaCl)  
 Day 3 Particle to Infectivity Ratios**



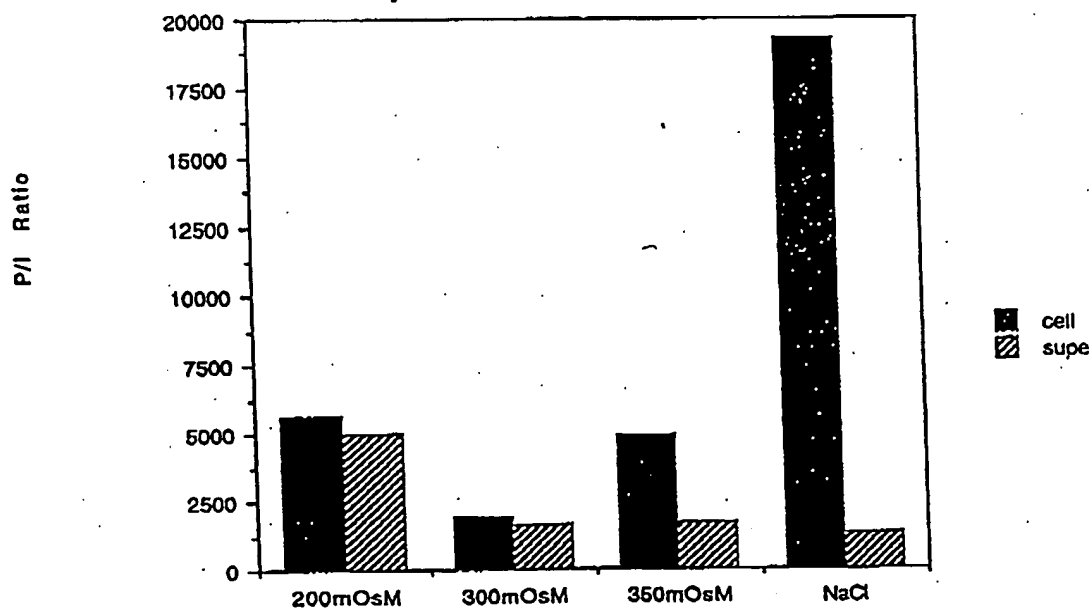
Figures 37A and 37B

FIGURE 37A and 37B

**C**  
**Bioreactor Osmolality Exp. (Sorbitol)**  
**Day 2 Particle to Infectivity Ratio**



**D**  
**Bioreactor Osmolality Exp. (Sorbitol)**  
**Day 3 Particle to Infectivity Ratio**



Figures 37C and 37D